PEDIATRICS

Handwritten Note

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Name:		
-		
Subject:	PEDIATRICS	



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1		•		
1				
			Date/	
	0		Page	
			PED1ATRICS	
	•			
		Neonalē -	First 4 wk. of life. ly - 7 days, cause of death - Prematurity e - 7-28 days, - Sepsis.	
)	4 Ear	ly - 7 days, cause of death - Prematurity	
		· Lat	e - 7-28 days, - Sepsis.	
9_0	· ·			
		Jerun –	37-42 wk geotation <37-wk	
1		ì		
7		Post ferm -	- > 42 wk	
7		Maria	7 - 1 -> 2 5 / 1 -	
7		Normal	$\frac{2.5 + 4kg}{2.5 + 4kg}$	
)	VIRW	< 2.5kg	
		ELBW	< 1kg	
		Macro	< 1.5kg < 1kg soura > 4kg.	
)	(1),000,000,000,000,000,000,000,000,000,0		
J_c)	Lubchen	cho chart:	
)	1		
<u>J</u>		Birth	LGA 90th centile	
I)	Weight	1 (ale Goodational Age)	
			AGA (Appropriate Geotational Age)	
).		10th centile	
).		SGA/1UGR	
	y			
6)		Geotational wks.	
(WKs.	
©		Constilui	lional:	
0		e (LGA (large Gestational Age)	
<u>_</u>		· LGA (large Gestational Age) · Short strature.		
(O		•	Delayed puberly.	
©		Silv.	· / /	

Date	
Date!	•
- All leru baby has 6 trontanelle:	0
 - All leru baby has 6 trontanelle: - Anterior - chorumando	0
- Posterior	•
- 2 sphenoid	•
- 2 Mastoid.	0_
Posterior fontanel - Closes at birth.	
open en 3% baby.	
Anterior fontanel - diamond shaped.	
2.5 x 2.5 cms.	_
At level	0
 Pulsatile	0
 Closes at 18-24 months of life.	•
U U	
Craniosynostosis: all	0
Cranio eyno stosis: Early closure of fontanel. Complication:	0
Complication:	0
- Micro cephaly	0
- Micro cephaly - ICT 1 -> Obtic alrophy. - coemelic.	0
- coemelic.	9
R- Craniectomy Syndromes associated - Apert 7	
 Syndromes associated - Apert 7	
Crouzon AD	
Pfiffer Carpenter - AR	-0-
 Carpenter - AR	<u> </u>
 The state of the s	- (
 Delayed closure of fontanel: - Rickets	0
- Nown's	0
	0
- Hypothyroidism - Hypophosphatasia - Cleido cranial dysostosis.	0
 - cleido cranial dysostosis.	0

		,	
I			
J	0		Date
	•		(Page
	•	Ø.	2 WKs baby, Hypotonia, hypo/hermia, umblical herma,
	•		constipation, physiological gaundice prolonged.
			Constipation, physiological gaundice prolonged. La Congenital hypothyroidism
	0		(humeral head - Epiphyreal dyrgenesis)
	0		(humeral head - Epiphyreal dyrgenesis) (A66) epiphysis of bone)
	0		,
	0_		Neonatal Screening:
	-		• 7SH; 74
	0		- Delayed rise of TSH
			- TBG deficiency (TSHB; T4V) - Best time: after 48hx (72hx)
d	0		- Best time: after 48hx (72hx)
d	0		M/c/c of cangenital hypothyroidism - 85% agenesis/
P	•		dysgenesis of thyroid gland.
	0		Gille I soll maidiens
P	0		Congenital hypothyroidism: Prevalance = 1:2000
	0	,	Girle \ Anis
P	0		Girle > Boys.
9	0		Neonatal screening: Conlinue
Ŷ	0		TSH; 74 · Cold temp
Ŷ	0		· Physiological TSH surge 48 hrs.
P			 Physiological TSH surge 48 hrs. APP > 48hrs lo 6days. In OP Ghai → 3-5days.
			· In OP Ghai > 3-5days
9			
P	0		→ Sample obtained → Heelprick. Safe area → Side prick.
	0		Safe area → Side prick.
	0		
Y	0		- pt in shock, venous access can't get en 60 sec M/c, site - Near Jibial fuberosity.
	0		- M/C site - Near Tibial fuberacity.
	0		Upper end of tibia Lower end of femuer. - In shock > i.v. fluide => 20 ml/kg bolus NS.
100	0		Lower end of tenner.
	1711111		- un sound > civiquica > 20 ml fkg bolus NS.

	Date/	
	Page	•
-7	# Most easely assesible venous roule - Umblical Vein.	•
	# [Phenyl Kelonuria]: Deficiency of Phenylalanine	0
	# [Phenyl Kelonuria]: Deficiency of Phenylalanine hydroxylase.	
	- n'eng cacaaine	0
	PKU = Fhenyalanine hydroxylase.	_@
		_
	Tyrosine	_a
	Tyrosine & Tyrosinase	
	DOPA	_
	\checkmark	•
	Dopa quinone	
	1 1	•
	Melanin	
	Phenyl alanine - Toxic to Brain -> so in PKU High Phenylalar	i he
	-Child Mental Refardation : 20 mg/dl	•
	- Developmental delay.	_
	- Exaggrated Reflexes	•
	- Microcephaly.	_(
	R - PKU	_
	· Supplement Tyrosine	(
	· Restrict Phenylalanine	(
	· Now Tyrosine essential.	
	· Ain: Sereun Phenylalaneine (6 mg/dl.	_
	· Lifelong.	_
		_
Q.	About PKUR, first step-	-
	A) Stop the substrate of the engine	_
	B) Supplement the engine.	-
	Provide delicient profesions	
	D) Provide déficient profeirs.	7
TO		

10	
10	. 5
10	Date
0	Maple Syrup Urine disease (MSUD):
	- Deficiency of a-kelo acid branched chain
	dehydrogenase.
0	- High Valure: Leucine: Isoleucine blood & CSF.
	- Coura
	- Severe acidosis.
	- We do dialysis - To remove Value: Leu: Isolevaire.
	Neonatal Screening: Continue
	· Jangem mass
10	- Spectrophotametry -> metabolic
10	· Cystic fibrosis
10	· Congenetal adrenal hyperplasea
	· GEPD deficiency.
10	· Biotin deficiency.
10	0 0
10	ANTHROPOMETRY: TERM BABY
10	Length - 50 cms
10	Head circumference - 35 cm
10	HC>CC but not more than 3 cm.
10	· HC>CC (>> 3cm) → Congenital hydrocephalus. → Asymmetric IUGR baby.
<u></u>	→ Asynemetric IUGR baby.
¶_0	V V
9-0-	$CC = HC \rightarrow \alpha f 9-12 wonths$ $By lyr ; CC>>> HC$
9-	By lyr; CC>>> HC
90	Upper Segment: Lower segment (US:LS) New born = 1.7:1
9	
	$A \neq 10 \text{ yrs} = 1:1$ $A \neq W \neq x = 0.9:1$
<u></u>	$\frac{49WK = 0.9:1}{15.000}$
0	# Achandroplasia: Short limb dwarf (US/LS 1) Hypothrodism: US/LS 1 (disproportionate Short Strature)
0	Hypothroausin: US/LS 7. (disproportionate short Strature)
Ö	Website: http://mbbshelp.com WhatsApp: http://mbbshelp.com/whatsapp

	•	
	Gate	
		0
	Meconium:	0
	95% pass meconium at 24 hrs.	•
	95% pass meconum at 24 hrs.	
	Cause of delayed passage meconium	٥
	Cause of delayed passage meconium - Imperforate anus	
	- Hirschprung / aganglionic → Rectium biopey. - Meconium eleus → Cystic fibrosis. → Small intestinal obstruction.	
	> Reclien biopey.	
	- Meconium eleus → Cystic fibrosis.	
	Small intestinal obstruction.	•
	S	•
g	48hrs baby has not passed meconium. Next Ix	•
	A) CFTR gené test	•
	B) Sweat Chloride	•
	c) Manometry	0
	b) Lower G1 contrast study.	٥
	→ A Hirschsprung	٥
	Treat méconicum éleus.	•
		0
	Delayed Urine: - B/L Renal agenesis - Maternal oligo hydrominios. Post. Ureltral valve B/L pulm. hypoplasia	٥
_	- B/L Renal agenesis	
	→ Maternal oligo hydromnios.	
	Post. Ureltral value	
	B/L pulm. hypoplasea	
	0.0775.04.0	-
	POTTER'S Sequence.	0
	Pottox's face - Mose timehad in	0
	Potter's face - Mose pinched en	
	Mingaathia	•
	Retrognathia Micrognathia Bag & mask -> Pneumo/horax.	0
	, , , , , , , , , , , , , , , , , , , ,	0

-			
1	0		
7	0		· 7
	9		Date
	•	Q	It a baby has not passed wrine in 1st 48hm Nort I.
	0	-	If a baby has not passed wrine in 1st 48hrs, Next Ix —> USG
	0		
	0	Q	3 days old, c/o - Weak dribbling urine stream.
	_		0/E - palpable distended bladder.
0			. △ → Posterior Urelhial valve.
			100: MCU (Micturaling Cysto Ure/hrography).
C	-		R: Cystoscopic Fulguration
			V , U
1			SGA/1UGR:
	0		Complication: TORCH enfection/Chromosal disorders.
1	0		Symptom - Asphyxia -> causes MAS
1	0		Meconium Aspirated Syndrome)
	•		PPHN (Persistent pulm. HTN of Newborn).
1			Severe 1098 - Pulmonary hemorrhage
) O		Limited Slores - Hypoglycemia, HypoCa; HypoMg.
	•		- Polycythemia
	•		bcoz in IUGR erythropoietin is
	0		- Polycythemia - Polycythemia - bcoz in IUGR erythropoietin is Very sensitive to hypoxia. - Neutropenia - Thrombocytopenia.
	<u> </u>		- Neutropenia
			- Thrombocytopenia.
	0	ภ	
		9	Full leren small for date babies are more disposed to -
	-0-		a) Hyper Cal
	•		6) CNS infection Common in preterm.
	0		
	0		As Hypoglycemia
1	0		
	0		
	•		
	0		

		8	٥
	Symmetric IUGR	Page! Asymmetric 10GR	@
Cause -	> Chromosal/	Malernal	0
Cuise	Torch	Complications	0
cell no.	V	W ,	0
Cell size	V	√	6
Brain	V	(A) spared.	6
700000	·	4c>ce>3cm	
		Brain/liver 1	
PONDERAL'S	INDEX:		_
	Wt (gm) X 100 Leagth (cm)3		•
	<i>Q</i>		٥
< 2	→ Asymmetric IU GA	8	0
>2 -	→ Asymmelrīc IUG1 → AGA/ Symmelric 1	TUGR	•
	<i>'</i>		•
Normal N	eonatal phenomenou	.:.	0
Milia: Dis	leonatal phenomenou tended Sebaccous gl	and on face & nose.	0
Erythema To	nicuu: Ery/hema	on face & trunk	0
	α-3 ε	rays of eye	0
Stork bites:	Pinkush gray cap	billary hemangioma	٥
	on back & bu	eftocks.	_0_
Epstein Pea	rl: Epîtheleal enc	lusion cyst on palate	_0_
	& prepute.	<u> </u>	
Natal feeth	Pre deciduos teelh): lower incisor position.	
interest latelle		1 O	<u></u>
VVIINCO	runi vaginai bille	ling: On 5th-71th day.	Û
Acrocuanos	s (Posibheral Quana	(is): Limbs cuanned	0
J	- () suprission	(is): Limbs cyanosed Lips pink.	0
# Birlt wt. :	= 3000 gm TERM -		0
Day 4 =	2700gm + \	10%	٥
Day 7 =	3000 gu Physiological diuresis		0
V	• ECFC		0

9	0		
	0		~ g
	0		Datz
	0		PRETERM _ 1 Zweeks
	0		
	0		15%
1	0		
1	0		IUGR → do not lose wt (ECF compact) → Wt. stable for 1-2 days then wt. gain.
			Wt. stable for 1-2 days then wt. gain.
1			
	-	Q.	Not normal en a new born ?
			Not normal en a newborn ? A) Proteinuria Jon ELBW B) Glucosuria
1	0		B> Glucosuria
	0		c> 1-2 pus cells/ hpf
9	0		Bacleriuria
9	0		
9	0	_	Neonatal Reflexes: Moro Reflex:
9	0	0	Moro Reflex:
9	•		1st phase - Abduction of shoulder goint Extension of elbow goint. Opening of fingers
9	0		Extension of elbow joint.
9	•		opening of fingers
9	0		
			and phase - Adduction & flexion.
			1 Abbanes 00 22 11:
	-0		- Appears 28-32 wks gestation.
	0		· Adduction / complete > 36-38 wks.
	0		- Disappears at around 2-3 moulte of life Persistence beyond 6 months abnormal.
0	•		rerougence vegoua 6 munta assurmar.
	0		Cerebral palsy.
			= - Asymmetric moros
	0		· Brachial blexus & injury.
Ö			· Brachial plexus pinjury. · # clavicle
	•		· # Humerus
	0		· Hemiplegia.

11		
		6
	10	6
	Date	•
	# Early hand preference is always abnormal	•
	# Early hand preferance is always abnormal - Hemiplegia at other side	0
	- 95% cases → Hemiplegia at Rt. side.	0
		0
	Exaggerated Moros -> HIE-1	0
#	ATNR (Asymmetrie Jone Neck Reflex):	
	Side of face - Extended	
	Side of occiput — Flexed.	_
	anset - 35 wks	
	Jully developed - 1 moulh	
	Duralion - 6-7 mouth	•
	Do not roll (Rolling Start when this reflex Disappears - burnths	0
	Disappears - burenthis Udisapp	(Sar)
		•
#	STNR (Symmetric tonic Neck reflex):	•
	Neck extended Jone 1 UL	•
	Jone 1 UL	•
	↓ LL	•
	Neck Hexed	
	Jone V en all limbs.	
	A. I. A	
	- Not present at birth.	<u> </u>
	This there a 12 month of life.	3
	- Wild along to another the motion	
	- Not present at Sursh. - Appears 4-6 months of life. - Disappears 8-12 months of life. - Child slart to crawl when this reflex disappe	arr.
#		0
77	Parachule reflex: - Not at bir/h	0
	- Appears 6-7 months of life.	0
	0 0	<u></u>
11		

3		1	AIIMS NICU · Protocoa 2014.
	•		Date
3	_		
	0		- Well developed at 10-11 moults of life Persiste life luine.
N. C.	•		- Persisté life lune.
3	•		U
	•		LANDAU Reflex:
8	0		- Appears at 3 moults of life - Disappears at 1 year of life.
			- Disappears at 1 year of life.
			77 0 0 0
1			On ventral suspension - Spine strengthen/
	_		Straighten.
			Child get out of flexion attitude by this reflex.
	(GRASP Reflex:
			- Appears 28 wks of gestalion
			- Well developed 32 wks
9	0		- Well developed 32 wks - Disappears 3 moults of life.
	0		. 0 0
	•	-	Sucking & Rooting reflex:
	0		Sucking & Rooting reflex: < 28 whe absent.
	0		At 28 wke - Some sucking bursts.
	0		32 WKs - Appear 34 WKs - Co-ordinalion
	0		34 WKS - Co-ordinalion
	0	Q	31 wks; 1500gms; Feed - 8
	_		A) Enteral →NG tube (Expressed Breast Milk)
	<u> </u>		B) Enteral + i.v. fluids
I	-		c) IV fluids.
I	0		B) TPN.
I	•		
1	0	9	33 wks; 1500gme; Feed - 8
			→ Enteral → Katori/Paladay/Spoon
TI I			33 wks; 1500 gme; Feed - 8 Lenteral -> Katori/Paladay/Spoon (Expressed Breast Milk)
	•		` /
	0		

	Dr. Si'ddharth Sethi	
	12	0
	Date	
	AIIMS NICU Protocol 2014:	0
	>34 wks - Breast feed	0
	32-34 wks - Katori (Expressed breast milk)	0_
	(32wks - NG tube (") " ")	•
	<1200 gms - i.v. dextrose + minimal enteral	<u> </u>
	feeds 10-15 ml/kg/day.	
	Rapid enteral feed can cause - Necrotésing	
	Enfero colitis.	-
		_
#	Fetal alcohol Syndrome:	•
	- Skin folds at the corner of the eyes	0
	- Low nasal bridge.	•
	- Short nose	0
	- Indistinct philtnum (groove b/w nose & upper lip)	•
	- Small head circumferance (microcephaly)	8
	- Small eye opening! - Hat unid face / midfacial or maxillary hypophoia - Thin upper lip. - Septal defects ASD VSD.	٥
	- Hat mid face / midfacial or maxillary hypophosia	. 0
	- Then upper lip.	0
	- Septal defects ASD	٥
	VSD.	_0_
Ω	A	•
9	ASS. C Marga Felal alcohol Syndrous except -	_6_
	Ass. c huga Jetal alcohol Syndrome except — A) Microcephaly B) Overgrowth c) Hat face	•
	(b) Overgrowth	-
	A) Cural hallalial line	ô
	D) Small palpabral fissure.	-0-
		0
		0
		0

-		1	
-	0		
1	•		13
1	0		Data
	0		PREMATURITY
1			2.5
			Respiratory System: RDS (Respr distress Syndrous).
	•		Chr. lung disease
	0		Bronchopuliu. dysplasia
	0	,	Oz dependence on P. Home To thisaby.
	_		4 isk of life Prevention: Nasal CPAP.
			Vit. A supplementation.
	_		Jurosemide
			Keep underhydrated in ICU.
	6		, / (
	O		CNS: DApuea (>20sec); or any period if ass. \(\bar{c}\) central
	0		cyanosis & bradycardia).
	•		O O
	0	8	M/c Sign of acule hypoxia in neonates
	0		A) Bradycardia
1	•		B) Jachycardia.
	0		V
	0_		O Central: asphyxia; preterius.
I	0		(i) Central: asphyxea; preterus.
-			3 Obstructure:
1	-0-		all newborn are obligate nose breathers till 4 moultis of life.
			4 months of life.
	-0	R	7 44 4 7
1	0	y.	Full leru newborn
No.	Õ		episodes of cyanosis — worsen when feed. Seems better when crying. > Chanal alresia -> B/L, posterior.
	0		Changl alagrica - Bill harloston.
No.	0		- China word - 19 c , journe
The state of the s	•		3) Mixed (M/c)
-	•		
Statement .	•		
1			

	. 14	
	Page	
	Aprea of premalitily:	•
	Risk: 1 < 28 wke → 100%	©
	Ouset: 1-2days; never >7days.	0
	$\mathcal{R}_{\mathbf{x}}$:	_
	1st Step: Nasal CPAP	©
	Melhy xanthines - Aminophylline (Narrow therapeutic range)	
	: Caffine Curate (Doc)	0
	00 & Wide margin of Safety	
0		
<u> </u>	Loading dose of Aminophylline: 5-6mg/kg. followed by maintenance dose	
	1-2mg/kg every 6-8hrs.	•
	<i>()' () ()</i>	•
	Caffeine Cilrale: Loading dose → 20 mg/kg	•
	Maintenance close -> 1-5 mg/kg/day	•
		0
	(2) Intracranial hemorrhage	6
	Ouly subdural hemorrhage es common en	٥
	term baby).	0
	- Capillaries in the subspendymal germinal matrix is fragile; so they supperse.	8
	matrix is fragile; So they suppere.	0_
	0 0 7	
	# Prelevin; sudden pale; Shock, for tanel bulging,	
	# Prelerin; sudden pale; Shock, for tanel bulging, seizures — Intra ventricular hemorrhage (IVH)	
	V	
	Risk IVH prelerius - <1500gm -> 30%	
	F50% IVH c en 24 hrs.	
	L75% " " 72hrs.	-6
	100 1	-
	# 100 for newborn having seizure - Transfontanel usg	
	the Court of December 1974	
	# Jerun; Breech -> 1VH Justrymental delivery -> IVH	0
	Yusirymenial allivery -> IVH	

	0	.	0ate
			Date
	0		Prevention of IVH:
	0		- Autotatal stoppids
	0		- Low dose indomethatin baby Prevent acidosis, intecliène en baby.
100	0		- Provent acidosis, inteclians en baby.
	0		O Q
	0		3 Asphyxia
	0		Poelerun Jerun .
I			1
			Periventricular Parasagittal injury
	•		V A D D A D D A D A D A D A D A D A D A
	•		Power: UL>LL Spaslic quadriplegic cerebral palsy.
	O		palsy.
			Diplogia
	0		(upper limbs Strong MRI: Coronal Section
	0		LL are weak) - parasagittal enjury.
	•		La Spaslit diplegia type
	0		of Cerebral palsy. Mentally Retarded
	0		0 7 0
	0	Q.	M/c sequal of Periventricular Leucomalacia in prelevin - Spaslic diflegia
	0		Leuco malacia in prelerin
			- Spaslic diflegia
	_0		,
	-		MRI: PVL (10C)
	0	- 4	- less white matter - Shrinkage Ventricle.
	0		- Shrinkage Ventricle.
0	0		
()	0		- Mentally Retarded.
	0		
0	•		
	•		
3	•		

	Ü .	
	Date /	0
	Date/	٥
	Stalus marmoralus: diffuse neuronal loss	0
	following asphyxia.	0
		0
	APGAR Score: 1,5,10 minutes	•
	- doesn't help in resusitation.	0
	- 5';7'; 10' low → Worse neuronal outcome.	0_
		_@
	0 1 2	-
	A = Appearance Central cyanosis/ Acrocyanosis Pink.	0
	Pale Pa= Pulse(HR) 0 (100 >100	•
	Po= Pulse (HR) 0 (100 >100	0
	G=Grimace No Grimace Crying	•
	grande sign	0
	A = Attilude Extended Mid Hexed	•
		6
	R=Respr Aprila Gasping Crying.	٥
	R=Resp ^r Apnea Gasping Crying.	6
	00	0
	NORMAL - 7-10	0
	<u> </u>	_0_
#	Moderale to severe asphynia; out of hospital CPR	_0_
	√	_0_
	ischemia reperfusion injury	0
	V	0
	Free radical damage.	0
	Re - Therapeulic hypothermia/ Selective head cooling:	0
	R- Therapeulit hypothermia/Selective head cooling: 33.5°C & in 6hrs of life; Keep for 72 hrs.	0
		•
	preventive	0
	/	0
- 11		

0					
0			•		17
				(A)	Date
0		Hypoxic I	schemic Enceph	alopathy (HI	ε):
0		anju	schewie Enceph ry to brain a	t severe aspl	ynia.
0			<i>(</i> /	/ (<i></i>
		Signs	STAGE 1	STAGE 2	STAGE 3
0	•	Loss of consciousn	es Hyperalert	Lelhargic	Guporous; Coma
		0		· · · · · · · · · · · · · · · · · · ·	
	•	Muscle lone	Normal	Hypotonic	Flaccid
-0-				· · · · · · · · · · · · · · · · · · ·	
-0-	•	Posture	* Normal	Henrow	Decerebrate
0					
	•	Jendon reflexes/	Hyperaclive	Hyperaclive	Absent
0				1 == 1	
0	•	Myoclonus	+10/	+n+	- nt
0		100000000000000000000000000000000000000	<i>(1,</i> ,	1.1.	
	•	Moro reflex	Strong	Weak	
0	-	Pupils	Mudrigai	Minerie	December 121
0		70012	Mydriasis	Miosis	Unequal, poor light reflex.
0	٠	Seizures	None	Course	Decerebration
0				Common	N a view carreir
	Ð	EEG finding	Normal	Low voltage	Busst suppression
		0 0		Changing to seizure activity.	Burst suppression to isoelectric
0	•	Duralion	< 24 hr it progresse	2; 24hrs - 14da	y Days to weeks
			otherwise may rema	in (A)	
-	•	Outcome	· Good ·	Variable	Death, Severe
0					Death, Severe deficit
0					V
0	,	200	•		
0	#	DOC: Seizure	es en Newborn		one.
0				(Bolus, 2	20 mg/kg)
9					

	18	٥	
		٥	
(3)	CVS: Hypoteusion; PDA (Palent duclus arleriosus).	•	=
		0	_
	PDA: Preterius => Asphynia -> PGs	<u> </u>	_
	PDA: Prelerius ⇒ Asphynia → PG: Jeru ⇒ Rubella infection → Vessel wall defect.	٥	_
		_	_
	R: Surgery		_
		-Ö -	-
	In prelerin: R: NSAIDS	-0	_
	(Ibrufen) & Indowelhacin)	-6-	-
	Lass methodoxic	٨	-
	Less rephrofoxic	0	-
	If Medical management fails -> Sx	•	-
	CIF of PDA:	٨	-
	C/F of PDA: 6-10 wks of life CHF	Ò	-
	· Prelerin baby, tailure lo wear off ventilator (hypoxia; Co2 relevion)	0	_ ,
	(hypoxia; Coz releulion)	•	_
		6	
	O/E: Bounding pulses & wide pulse pressure. Coulinuous machinery nuriour at the upper left sternal border.	0	_
	· Coulineous machinery nureurs at the upper	٥	_ ;
	left slerval border	<u></u>	_
			_
(4)	GI System: Necrolising Enterocolilis	_0_	— ,
(P)	,	-	- ,
\$	Eye: ROP/Retrolental fibroplasia.	-0-	_
(G)	Hupo Merria: Glucenia: Hupo Ca: Hupo Ma.	0	-
(8)	Hypotherina; Glycemia; HypoCa; Hypo Mg.	0	_
7	Anemia; gaundice; Infection.	6	
	U U	•	
		٥	_
		•	_
		•	_
		-	

1	•	
-	0	. 19 Date
	•	Date
	•	Necrolizing Enlerocolilis (NEC):
	•	RIF: D'Immalure Gut.
	0	NEC: Susceptibility of premalure infants
	0	NEC: Susceptibility of premalure infants - Reduced proteolytic enzymes
		- 1 Gastric PH
		- V peristalsis
I	_0	- I motility
I	_	- Allered epithelial membr & tight gunclion
I		- Altered backerial flora.
I		- + nucous coat
		- Allered unicom protein
		- 1 epithelial permeability.
	•	. / /
F	0	· Sepsis foxins
	0	· Sepsis foxins · Top fed (Cow wilk)
	0	
Lie Lie	0	3 Malure Cocaine
	0	3) PPIs; Anti Hz
	•	3) Rapid advancement of feed.
回回	•	
图 图		Prevention: OAntenatal steroids
	•	- VIVH
	<u> </u>	- V PVL
	0	- √ NEC
	0	- IRDS
		- V Neonatal mortality.
	9	HUMAN MILK: 1 proteolytic enzyme
il in	0	V Gastric p4
	•	1 peristalsis 1 motility
	•	1 motility
	•	Less pathogenic bacleréal flora
		, 0

0

	Date/	٥
	Page	•
	- Altered mucus coat (Improves)	•
	- Altered mucus coat (Improves) - I sepithelial permeability.	
		0
		•
		0
	(2) Irophic feeds - expressed milh 10-15 ml/kg/day.	_0_
	10-15 ml/kg/day.	
	, , , ,	_
	3 Avoid PPIs; auti 42	-
	 Avoid rapidly feed advance. Probiotics. 	_
	S Probiotics.	-
		•
2.	1 yr old infant; 10-12 episodes of walery stools / day for last 9 days. Along c Zh, which else should be advised —	•
	for last 9 days. Along & In, which else should	
	be advised -	0
	A) ORS c autibiotics (B) ORS orally.	Ö
	B) ORS orally.	<u> </u>
	c) DRS & low lactore diets & probiotice.	0
_	D) ORS È low laclose diets & probiotice.	٥
$-\ $	<u>'</u>	٥
-	PROBIOTICS:	
$-\parallel$	Prevents NEC — Lactobacillus acidophillus & Befidobaclerium infantis fo VLBWs	_0
$-\parallel$	& Bifidobaclerium infantis	_6
	to VLBWs	
	Lactobacillus rhamnosus & Saccromyces boulardii	<u> </u>
	Lactobacelles rhamnosus	0
$-\parallel$	& Saccrouyces boularder	<u> </u>
	•	0
$-\parallel$		0
-#		0
\parallel		
		1

Modified Belli Staging for NEC: Stage la: Suspected NEC; Bristerlian :ileus; Ocaill blood in stree 16: Suspected Gross blood loss. 11a: Refinite HMR Diffuse presunatoris; Portal Veraus for 11b: Definite HMR Diffuse presunation; Portal Veraus for 111a: Advanced DIC: Shock; Positonitis 111b: Advanced-Presunoperitoreum perforation 8. Neonate; diotended abdomen & Bft gas shadow under the diaphragm. A NEC Sa 90% preterin 2ad-3rd wh of life. Pealures of NEC are all except A Abd diotention NB 1 Bowel round C) Presunoperitoreum Metabolic accidosis R: NEC Stop all oral feechs ThN (Succes, Aris, lipids) Apriliotics (Cefotanine; Vancomycin; Melsönidazoli) Stage III — may require Sx.				HMT = Hyp	onalremia, Metabolic acidosis, Thrombocytoping.		
Modified Belli Staging for NEC: Slage la: Suspected NEC; Distertion: ileus: Dealt blood in Street Ib: Suspected Gross blood loss. Ila: Refinite Gross blood loss. Ila: Refinite HMT. Diffuse presumatoris; Portal Venewife IIIa: Advanced DIC; Shock; Peritonitis IIIb: Advanced-Presumoperitoneum perforation Perforation Q. Neonate; ctiotended abdomen & Bfl gas shadow under the diaphragm. A-NEC La 90% preterion Rad-3rd wh of life. Q features of NEC are all except A Abd. distention B 1 Bowel sound C Presumoperitoneum Metabolic acidosis R: NEC Stop all oral feeds TPN (Glucine, Ari, Cipids) Antibiotics (Cefotaniune; Vancomycin; Metronidozole) Stage III — mey require Sx.		•		•	<i>U </i>		
Modified Belli Staging for NEC: Slage la: Suspected NEC; Distertion: ileus: Dealt blood in Street Ib: Suspected Gross blood loss. Ila: Refinite Gross blood loss. Ila: Refinite HMT. Diffuse presumatoris; Portal Venewife IIIa: Advanced DIC; Shock; Peritonitis IIIb: Advanced-Presumoperitoneum perforation Perforation Q. Neonate; ctiotended abdomen & Bfl gas shadow under the diaphragm. A-NEC La 90% preterion Rad-3rd wh of life. Q features of NEC are all except A Abd. distention B 1 Bowel sound C Presumoperitoneum Metabolic acidosis R: NEC Stop all oral feeds TPN (Glucine, Ari, Cipids) Antibiotics (Cefotaniune; Vancomycin; Metronidozole) Stage III — mey require Sx.		0			Date		
IIa: Definite Focal procumatoria	_			14 11/2 1 Palli Class			
IIa: Definite Focal procumatoria	_			Modified Blus orage	ng for NEC:		
IIa: Definite Focal procumatoria		<u> </u>		Slage la: Suspected NEC	Distersion : leve; Occult blood en Stool		
IIb. Definite MMT Diffuse preumalouse; Portal Verous of IIIa: Advanced DIC; Shock; Peritoritis IIIb: Advanced- Preumoperitoneum perforation J. Neonalē; diotended abdomen & Bfl gas shadow under the diaphragm. Δ-NEC Δ-NEC Δ-NEC Δ-Abd diotention β 1 Rowel sound C) Preumoperitoneum D) Metabolic acidosis R: NEC · Stop all oral feeds · TPN (Glucise, AAs, Lipids) · Stage III — may riquire Sx.	_	0		/	•		
IIIa: Advanced DIC; Skock; Peritornitic IIIIb: Advanced- Preumoperitoreum perforation J. Neonalē; diotended abdomen & Bfl gas shadow under Une diaphragm. Def Jago prelerin And - 3rd wh of life. J. Pealures of NEC are all except A) Abd diotention St. 1 Bowel sound C) Preumoperitoreum Metabolic acidosis R: NEC Stop all oral feeds TPN (Glucare, AAs, Lipids) Antibiotics (Cefotanime; Vancoungen; Melronidozole) Stage III— may require Sx.		0		- //			
Stage III - may require Sx.	Ö	0		II6 : Définite	HMT, Diffuse preumaloses; Portal Venous gas.		
perforation 9. Neonatē; diotended abdomen & B/L gas shadow under thē diaphragm. Δ - NEC Δ - Sa 90% preterun Rad - 3rd wh of life. 9. Features of NEC are all except 4) Abd. distention B/S 1 Rowel sound C) Pneumoperi toneum D) Metabolic acidosis E: NEC • Stop all tral feeds • TPN (Glucose, AAs, Lipids) • Antibiotics (Cefotanime; Vancomycin; Metronidozole) • Stage III — may require Sx.		0			DIC; Shock; Peritonitis		
9. Neonalē; distended abdomen & Bfl gas shadow under Lhē diaphragm. Δ - NEC Δ 3α 90 % prelerum Rnd - 3rd wk of life. 9 Fealures of NEC are all except A) Abd. distention B) 1 Bowel sound C) Pneumoperi toneum D) Metabolic accidosis R: NEC · Stop all oral feeds · TPN (Glucose, Ah's, Lipids) · Antibiotics (Cefotanime; Vancomycin; Melronidozole) · Stage III — may require Sx.		_0_		III6: Advanced-	Preumoperitoneum		
9. Neonalē; distended abdomen & Bfl gas shadow under Lhē diaphragm. Δ - NEC Δ 3α 90 % prelerum Rnd - 3rd wk of life. 9 Fealures of NEC are all except A) Abd. distention B) 1 Bowel sound C) Pneumoperi toneum D) Metabolic accidosis R: NEC · Stop all oral feeds · TPN (Glucose, Ah's, Lipids) · Antibiotics (Cefotanime; Vancomycin; Melronidozole) · Stage III — may require Sx.		•		perforalion			
9. Neonate; distended abdomen & Bjl gas shadow under the diaphrague △ NEC △ Sa 90% preterue 2nd-3rd wh of life. ④ Jealuris of NEC are all except A) Abd distention VBS 1 Bowel sound C) Preumoperi toneum D) Metabolic actidosis ♣ : NEC · Stop all oral feeds · TPN (Glucose, AA's, lipids) · Antibiotics (Cefotanime; Vancomycin; Melronidazole) · Stage III — may require Sx.				7 0			
9. Neonate; distended abdomen & Bjl gas shadow under the diaphrague △ NEC △ Sa 90% preterue 2nd-3rd wh of life. ④ Jealuris of NEC are all except A) Abd distention VBS 1 Bowel sound C) Preumoperi toneum D) Metabolic actidosis ♣ : NEC · Stop all oral feeds · TPN (Glucose, AA's, lipids) · Antibiotics (Cefotanime; Vancomycin; Melronidazole) · Stage III — may require Sx.							
Uhe diaphragm. A - NEC Sa 90 % prelerum Rad-3rd wh of life A Abd. distention A Abd. distention A Metabolic accidesis A Me			Q.	Neonale; distended al	domen & B/L gas shadow under		
S-NEC San 90% prelerui And-3rd wh of life. Pealures of NEC are all except A) Abd distention B) 1 Bowel sound C) Pneumoperi toneum D) Metabolic accidosis R: NEC Stop all oral feeds TPN (Glucase, AA's, Lipids) Antibiotics (Cefotanime; Vancouncin; Metronidazola) Stage III — may require Sx.			=		, , ,		
Sa 90 % prelerum 2nd - 3rd wh of life 1 Pealurs of NEC are all except A) Abd distention B) 1 Bowel sound C) Pneumoperi toneum D) Metabolic accidesis E: NEC Stop all oral feeds TPN (Glucase, AA's, lipids) Antibiotics (Cefota nime; Vancomycin; Melronidazole) Stage III — may require Sx.		9		A- NEC	•		
Pealurs of NEC are all except A) Abd: distention B) 1 Rowel sound C) Pneumoperi toneum D) Metabolic accidosis R: NEC Stop all oral feeds TPN (Glucase, AA's, Lipids) Antibiotics (Cefotanime; Vancomycin; Melronidazole) Stage III — may require Sx.		•					
Pealurs of NEC are all except A) Abd: distention B) 1 Rowel sound C) Pneumoperi toneum D) Metabolic accidosis R: NEC Stop all oral feeds TPN (Glucase, AA's, Lipids) Antibiotics (Cefotanime; Vancomycin; Melronidazole) Stage III — may require Sx.		0		2nd-3rd wh of life.			
A) Abd. distention B) 1 Rowel sound C) Pneumoperi toneum D) Metabolic accidosis R: NEC Stop all oral feeds TPN (Glucose, AA's, Lipids) Antibiotics (Cefotanine; Vancomycin; Melronidozole) Stage III — may require Sx.		0			0 0		
1 Rowel sound C) Pneumoperi toneum D) Metabolic acidosis K: NEC Stop all oral feeds TPN (Glucose, AA's, lipids) Antibiotics (Cefota nime; Vancomycin; Melronidozole) Stage III — may require Sx.		0	0	Fealures of NEC are all	except		
1 Rowel sound C) Pneumoperi toneum D) Metabolic acidosis K: NEC Stop all oral feeds TPN (Glucose, AA's, lipids) Antibiotics (Cefota nime; Vancomycin; Melronidozole) Stage III — may require Sx.	The state of the s	0		75-65-57			
Metabolic acidosis R: NEC · Stop all oral feeds · TPN (Glucose, AA's, lipids) · Antibiotics (Cefotanime; Vancomycin; Melnonidazole) · Stage III — may require Sx.		0		,			
Metabolic acidosis R: NEC · Stop all oral feeds · TPN (Glucose, AA's, lipids) · Antibiotics (Cefotanime; Vancomycin; Melnonidazole) · Stage III — may require Sx.		Ö		c) Pneumope	ri toneum		
· Stop all oral feeds · TPN (Glucose, AA's, Lipids) · Antibiotics (Cefota nime; Vancomycin; Melronidazole) · Stage III — may require Sx.	I						
· Stop all oral feeds · TPN (Glucose, AA's, Lipids) · Antibiotics (Cefota nime; Vancomycin; Melronidazole) · Stage III — may require Sx.	U	•					
· Stop all oral feeds · TPN (Glucose, AA's, Lipids) · Antibiotics (Cefota nime; Vancomycin; Melronidazole) · Stage III — may require Sx.		Ä		R: NEC	•		
• TPN (Glucose, AA's, lipids) • Antibiotics (Cefotanime; Vancomycin; Melronidazole) • Stage III — may require Sx •	I				ds		
• Antibiotics (Cefotaniune; Vancomycin; Melronidazole) • Stage III — may require S_X •	I						
		0		· Antibiotics / Cefotanime: Vancouvein. Melsonidazolo)			
		0		· Stage III - man require Sv.			
		0		0,000			
		0		-			
		0					
		0					
		0					
	II.	•					

	22	
	Date	
0.	Child \(\bar{c}\) NEC \(\bar{c}\) perforalion & poor general cond \(^n\) is	•
	treated \bar{c} :	0_
	A) Conservative It only.	0_
	By Frank drain & glove	•
	C) Laprotomy à resection anas fomosis	<u></u>
	D) Extracorporeal membronygenation.	0_
		–
	Stage III < Stable - Laprotomy Unstable - Peritoneal drain	-
	Unstable - Peritoneal draw	6
	Alsonia Tai Consta	0
	NEONATAL SEPSIS:	0
	= Symptorns + Baclerenna	0
	EARLY LATE	0
	<72 hrs.	0
R/F		Ö
/	Foul liquor M/c/c world - Coagulase -ve staph	
	PPROM: Chorioannionitis. In India-Klebsiella, S. aureus.	
M/c/cv	orld: Group B Streptococcus, E. Coli (M/c) Meningitis => CSF exam	٥
	(M/c) Meningitis => CSF exam	٥
<u> </u>	Meningitis ⇒ CSF exam ⁿ Ampicillin + Genlamycin - Cefotaxime + Amikacin	_0_
		۵
	M/c/c India: Klebsiella, Saureur	_6_
_#	Carina and a language and a second a second and a second a	-0-
# O	Sepsis screen for early diagnosis:	•
<u> </u>	TLC < 5000/cumm or > 20000 ANC < 1500/cumm	6
3		0
	PS for band cells / Immature neutrophils > 20% (I/7)0.20) & toxic granules	0
(F)	Micro ESR (Burin-3 days of life) >15 mm fall in 1st hour	6
3	CRP; Procalcitonin tve	•
(b)	Lumbar puncture (In late Sepsis)	0
		<u> </u>

201	1	1	
1	0		
	0		23
	0		Data
	0	7	Chest X-Ray
0	0		
2	0		
3	0	#	ANC = Neutrophil + Band cells
2	0		
1	0	9	Lat finding in Neonatal Sepsis except -
			A> 1°CRP
			B) Leucocyfosis
J			Let VESR
1	•		D) Toxic granulated multilobulated nuclei
I			,
	0		Duralien of Antibiotics en Neonatal Sepsis:
I	0		Bacterenna = 10-14 days
	0		Meningitis = 21 days
	0		Meningitis = 21 days Arthrilis, Osleo myelilis = 426 wks
	9		
	•		Tempr regulation of newborn:
	0		Non-shivering Thermogenesis -
	0		Brown Fat
	0		- Nape of Neck
			- Interscapular - Around kidneys & adrenal
	0		- Around blood vessels (around mesentery).
	<u> </u>		There were former to the state of the state
	-0-		Axillary tempr:
	0		- Normal 36.5-37.5°C
	0		- Cold stress/ mild hypothermia (36-36.4°C)
	0		- Moderate hupo/hermia (32-35.9°C)
	0		- Severe · (< 32°C)
9	•		- Hyper/hermia > 37.5°C - mostly eatrogenic.
	•		Prevention of hypothernic: KMC (Kangaroo mother case).
	0		U U/

	0	
	0	25
	•	Data
	0	Retrolental Fibroplasia /
	0	Retrolental Fibroplasea / ROP (Retina of Premalurity):
	0	R/F: Prelerun.
	0	R/F: Prelerun. High flow Oz.
	0	
	0	- Proliferation, ditalation & lortuous vessels.
	-0-	- Iraclional relinal détachment.
	-0	- ROP stage I-V: 'plus' - Blindness.
	0	Stage IV: Incomplete tractional RD Stage V: Complete """
	0	Stage V: Complèle "
	0	
	0	
	0	91% 95% 99% Newborn
M		100 mm Hg Adults
	0	Нд
	0	
	•	Sp02 %
	•	
	0	
	0	
		PO2 (mm Hg)
	_Ö	
	-	WHO targets sp02 = 91-95% in preterm.
9	Ö	Quv. of ROP
	0	ADD POD anidalisa (a)
	0	BLINDNESS: Regular indirect ophthalmoscopy. AAP ROP guidelines - (Risk <30 wks / <1500gms) Gestation(wks) 1st visit to ophthalmiologist Po st mensural (wks) Interval (wks)
	9	Post was alway (with)
	0	22 31: 9
	•	23 31 8
	•	24 31 7
	0	*

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	25	3/	6	٥
	26	3/	5	0
	27	31	4	Ć
	(8)	32	4	٥
	29	33	4	0
	30	34.	4	
Q. Pe	dialrician en	a district he	ospital calls ophthalmo	loaist tor-
==	a> New born	u c Respira	tone distress	
	& New 60	rn 28 wks ge	atalian	
	4	Atler time	isit baby has to go to	
	oph thale	uningint ever	ue 2 with till his/hes	•
	eue l	ook like to	n relina.	6
	1	out some wu	M Faccount.	Ó
				•
R	elinal Vascular	izalion: Lett	0110.	-
	5000	0		
			Vaccularization of	
	K	16.16	Vascularization of	
	32	340	Starlo at 16wks	
			finishes medially a	ut (
	Medial	l ala	32 WKS & laterally	
	Media	Cape	at 40 wks.	
# 8	: ROP		·	
" X		consulation /	Parishand allation	
	- T. A	organian, 1	Peripheral ablation blui disease)	
;	- Carallaria	er yor (m)	nus cusuasi)	
-	- Cryotherapy. - Stage V → R	atinal south	chewant.	4
ew drug -	Borra oizum	of - Anti-1	rege sociotant	
	~ or reignin	uo -> mo	regf; resistant.	
	•			, m

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	_					
	0	,,	0			/ rage
J	0	#	Respiration:	. 00 \ /0		
9			Jachypned	a · KR > 60	/ww·	
	0		Cilyanyayay	Anderson	Retraction Scor	- ·
1	0		acourman	rivocossor	Meracion Scot	2 .
I	0		Fealure	Score O	1	2
I			Chest movement		Resp ^r lag'	
I				0	Resp ^r lag dupper chest inspiration	in) Seesaw Respr
	0		Inter coastal	None	Minimal	Marked
I			Retraction			
I				Nouie	'71	12
I	•		Xiphoid Retraction			
			Nasal Flaring	None	23	17
	•		V	4	· ·	
	0		Expiralory	None	Audible·c	Audible.
	Ö		Greent.		Sthetos cope	···
A	0					
	0	#	Downes scoring	g for Respi	ralory distress	:
	0			<i>U</i> 1		
	0	9	Jealure	Score 0	·	2
			RR (per min)	(60	60-80	>80/apreic episode
	0			·····		
			Cyanosis (Central)	None	In room air	in 40% 02
	-0-		V			
	- 		Retractions	9	Mild	Moderate-Severe.
	0				A. 171. 5	A. 48/4. 6
	0		Grunting		Audible c	Audible É
	0		A.	Class	Sthetoscope	Sthetoseope
	0		(uid-axi/lary (ine)	Clear	1 (Delayed)	Barèly audible.
	0		(aug-axe/lary une)			
0	0		,			
	_					

	0	
1	0	. 29
	0	Data
	0	R: · Humidified Oz (40-60%)
0	0	- We don't give 100% 02 6coz of ROP.
		· Nasal CPAP: mild - moderate distress
	•	early in ELBWS
	0	Fi O2: Start c 40-60%> room air
	0	PEEP: 5 cm H20
	_	
	<u> </u>	· Intratracheal surfactant - Severe; as rescue.
1	0	- Inlubale the baby (IN)
	0	- Inlübale the baby IN Give Surfactant SUR Extubate the baby E
I	0	Extubate the baby E
H	•	
I	0	Survaula - Bovine
I	0	Curosurt - Porcine
I		Sunthetic also available
I	0	Synthetic also available
I	• A	201 to Prolote balo i amazaran 1 C
I	0 9	32 wke, Preleriu baby in emergency C.S. Grunling, RR = 70/min. Best management of choice
I	•	Grunding RR = 70/ win Best wangement of crosse
I	-	B) Mechanical ventilation.
I		c> CPAP
	-0	DS Surfactant therapy & wechanical ventilation.
I	0	7,000
	Q.	All occurs en RDS except:
I	0	A> Cyanosis
	0	B> Occurs en prelerun
	•	c) More in IDM
1	9	LBY Treated by 100% 02
	0	, y
	0	
	0	

	30	
	Date Page	0
Ø.	All true about CPAP except:	0
<u> </u>	A) Initiated FiOz 0.40-0.60	0
	B) Used in aprea of prematurity.	0
	c) Improves compliance.	<u> </u>
	Volume; FRC1[RDS FRC (CV)	<u> </u>
_	D) Used prophylactically in ELBW's	0_
	E) All live.	<u> </u>
		Ö
<u>g</u> .	Term female, Birlh wt. = 3.5kg, uncomplicated delivery.	•
	Respiratory distress after birth.	6
	CxR - Ground glass appearance	6
	On ventilation & given surfactant.	0
	but condu deteriorates & hypoxemia increases.	0
	4/0 sibling dying è in one week è similar	Ô
	complain. ECG & blood culture -(1).	ő
	4 ≥ Neonatal Pulm. Alveolar proteinosis	۵
	La Autosomal Recessive	6
	R: Early lung transplantation	٥
	R: Early lung transplantation	٥
		<u>-</u> 6_
	Postmorlem Bx - Pink eosinophilic material in lung.	•
		-0-
	- Idopathic: 90%	0
	Adult or acquired	-8-
	196 antibodies to GM-CSF	0
	- Secondary - 5-10%	0
	Hacuatological malignancy	0
	Inhalateonal lungds. Sélicon	0
	Titanium Oxéde.	0
	- Congenital: 2%	0
		0

I	•	
I	•	31
I	0	Date
-	0	CT Scan - Crazy paving pattern
Į,	0	(Prominant intraalveolar septal).
	0	R- Early lung transplant en neonales.
The second	0	Adults -> Brancho alvealar lavage.
	0	O .
	0	Respiratory distress: Newborn
	_	/ /
		Tracheo-esophageal fistula (TEF)
	0	Tracheo-esophageal fistula (TEF) M/c lype - Type C
		Distal TEF
	0	Esophageal alresia
	0	- Gandië newborn & frolling
	0	- Aspirates gastric juice lead to preumania.
	•	- Not a surgical emergency.
The same	•	R - Keep him propped up.
	0	- Suclion catheler in upper blind exophageal pouch.
	•	
	0	Diaphragualic hernia:
A. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	Ò	1 2 2 10 10 11
A STATE OF	0	pushed heart & trachea - lo opposite side. Scaphoid Ab domen
1		· Scaphoid Ab domen
		• Barrel Chest
	_0	· Mediaslinal shift to right
		· Apparent dextrocardia
5	-0	· Peristalsis on left chest.
-		
	6	Diaphragus — develops from septem transversum & pleuroperitoneal canals. \$\frac{1}{2} \frac{1}{2} \text{ai} \text{ to close on left-side}
		& pleuroperitoneal canals.
1	0	'> fael to close on left side
-	•	(Bochadelek hernia)
I	•	· <5% are B/L
	0	
1		11

	'	
1	•	
1	0	Data
I	0	Page
1	•	Prevention: PPHN
	0	- Ejeclive intubalion
I		- 4FOV > 300-600/min
A STATE OF	0	R: PPHN
I	0	· i NO
	0	· Sildenafil PDEV unhibitor
	M	en drug. Bosenfan, Ambrisentan — Endothelin antagonist.
		· antagonist.
	-0	 PGI₂ ⇒ Gloprost Aulodipine; ECMO (Extracorporeal memb^r oxygenalion)
		· Autodipine; ECMO (Extracorporeal membr
		oxygenalion)
	0	
	0	Jransient Tachypnea of Newborn (TTNB): R/F: · Jerus by C.S. (lunge are wet) · Macrosomia
	®	R/F: · Jerus by C.S. (lungs are wet)
	•	
EX.	0	· Excessive malernal sedation.
	•	· Precipitous labour.
	0	/
	Ô	CxR - a prominent horizontal fissure Most specific fealure.
	•	Most specific fealure.
	0	
*1	•	· Benign cond ⁿ
	0	· Self limited: 48-72hrs.
	_	· Fior requirement < 0.40
-	Ŏ	· Never require mechanical ventilalor.
	0	
The state of the s	0	Meconium Stained liquor:
1	0	Meconium is marker of Perinatal Hypoxia
-	0	
No.		Gloffis of en Parasympathetic Stimulation
N. W.	0	<i>*</i>
	0	passed Periotalsis ++
	•	passed Periotalsis ++

1	1	
	34 Date	0
	Date	0
	Perinatal hypoxia: Common en posteren	٥
	Perinatal hypoxia: Canunan en posteren 6coz of UPL.	0
	0 0	0
	Meconium:	•
	Meconium: Physical - 1 — ball value mechanism	٥
	- air leak 20-30%	٥
		_
	Chemical - Irritant -> pneumonia	
	Chemical - Irritant → pneumonia → Impair surfactant func ⁿ .	0
	Biological - Good culture media	•
		0
		٥
	Meconium Stained liquor.	0
	<i>↓</i>	
	Baby born	6
	Baby born V Jone is good	0
	Vigrous (- Respreffort is good	8
	Vigrous Respreffort is good Vigrous HR > 100/min	
	Yes No	_ _
	Transfer Catheler:	
	Transfer Catheler the baby to in the nose wother	
	mother 1	•
	PPV & 100% 02.	0
)	Sequence of Resuscitation	٥
	A) Mouth -> Nose	0
	B) Nose -> Moulh.	0
	c> Moulh → Nose → Irachea	•
-		6
#		0

10	
10	35
	Date
0	Intra celerine TORCH enfections:
0	Intra celerine TORCH enfections: Others — HIV, HBV, Varicella, Syphilis.
	Common features: (i) - Asymptomalic
0	n- Asymptomalic
	# Rubella: Transmission-2 peaks
0	\cap
0	
	10-12wks Delivery
0	4 0
0	CRS Rubella > 16wks
	CRS Rubella > 16wke (Congenital risk CRS < 1% Rubella Syndrome).
0	Rubella Syndrome).
	94 (1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2
	3 - If Symptomalic • SGA; failure lo lhrive
0	· San puis the suboculationis
0	 Anemia; Unto mbocytopenia Hepatospleenomegaly: Unexplained Rash & Cholestasis:
0	· Unexplained Rosh & Cholestasis.
	△ - 19M (Astic of infection)
2	Δ - IgM (Δstic of infection) IgG persisting beyond 6-9 months
	# HIV in infants
0	- Infants Can't make IgM-HIV or IgA-HIV.
	- Maternal IgG - HIV can persist in the baby
0	for 18 months.
0	- · HIV < 18 month : Diagnosis.
0	Best: DNA 9 PCR
0	P24 assay Culture is difficult.
	Culture is difficult.
Real of	

	36	٥
	Page	Ö
	Intracranial calcification 7 M/c/c - Toxoblasmosis	0
	& Choriorelinités J M/c/c - Poxoplasmosis	0
	- CMV	0
		0
	Jonoplasmosis CMV	۵
	- 25-50% - Periventricular Calcification.	<u> </u>
	- Charoid plexus calcification Alto phy of brain (Cortical).	
	- Subependyma & Cadale - Hydrocephalus ex vacuo.	_
	nucleus calcification: - M/c/c of Non syndrouse SNHL	_
	- Hydrocephalus - Seizures	
_	- Seizures - Microcephaly	•
	- Mental Refardalian.	•
		•
		0
₫ .	Pregnant lady; no complain J. True about transplacental	٥
	Mild cervical lymphodenopathy CMV infection:	0
	un 1st brimester. Prescribe - It is M/c/c of non-cyndromic	8
brevent	1 Operannicum but the was SNH1	Ô
ertical	non compliant. Baby born	٥
antuus	sion c hydrocephalus & & Does n't stablish & of CMV	3
	intraciribral calcification. In alonate -	
	Soxoplasmoses A) Urine culture of CMV	<u> </u>
300	196 (MV ante bodies en blood	6
<i></i>	: R: Pyrémethamine C> Intra-nuclear inclusion + Sulfadiazine bodies in hepatocytes (Owl-eye)	-0-
	+ Sulfadiazine bodies en hepatocytes (Owl-eye)	<u> </u>
	D) CMV viral DNA in blood	
	△: Best: IgM Junusnosorphire by polymerase chain reach.	
	assay.	
	Sensifivity of ELISA: # Best specimen - Urine culture 19A >> IgM & Saliva.	0
	19A >> 19M & Saliva.	•
	preunonia preunonia	0
	preunonéa.	8
11		

	0	
1	0	Date
è	•	Paga
	•	R: CMV
	0	DOC: i.v. Ganciclovir (Severe, Child, pregnant)
	0	
	0	 Oral; Prodrug → Valganciclovir Resistant lō oral Foscarnet
	Ö	- Resistant lō oral Foscarnet.
	0	
I	0	Congenital Syphilis: EARLY LATE
I	_	
I	0	- È in 1st 2yrs of life Afler 1st 2yrs.
I		- Mucocutaneous rashfrhinitie Hutchinson's Triad:
I	0	(Snuffles). O. Hytchinson teeth/
I	•	- Lymphadenopathy mulbery molare -1st
	0	- Hématological (Autoimmene lower molars.
I	•	Anemia) - Saddle wose, Frontal bossing,
Y	Ö	- Renal lesian Olympian's brow,
	0	- Skeletal (Osteochandritis, Higoumeraki's Sign
	•	metaphysitis, Periostitis) (Sternoclavicle prominence)
	0	- Glavesma - Rhagades
	•	- Pseudoparalysis of Parrot @ Interstitial Keratitis
	0	3) Nerve deafness. (SNHL)
O	_Ö	Pseudoparalysis: - Cluftons goints
		M/c/c - Seurry (paintess goints)
	-0	- Early syphilis Risk of enjoing. - Ostesmyelitie
	0	- Usteaught to
	0	- Septic arthritis DOC - Penicellin G
	0	- Hypokalennia → Hypotonia. → 10-14 days
¢.	0	
	•	
	0	
Ó	•	
	0	
Ġ.	0	

	Date
0	
Rubella Syndrome	exphaly (Mental Refardness)
Traid - Micros	rephaly (Mental Refarghuss)
Catarac	ate.
Gy man	,
M/c eye menifestation	of Rubella - Salt & pepper fundus
	Calaract
	Glaucoma
	Micro-ophlhalmia
	/
HEART - PDA	
Perij	sheral pulm stenosis
-ASD	(Rare).
	. 0
J. Rubella embryopathy	except.
B) MR	6
D) PDA	0
D/ 1 D.1	4
R. Jane about Rubella em	Systema // except:
A) Diagnosed when	bryopa/hy except: 1gM actibodies in child. wks results in major omalies
Datection after 16	wes resulté in maios.
congenital an	omalies.
c) Deafness, heart of	isease, Cataract.
9. Hypoplastec limb - Va	pricella (Chicken pox)
eu eu	ubropathy during pregnancy.
	0 0 0 0
	•
	•

	0		39
	(Data Page
			Varicella Embryopathy —
	0		· Skin Rash
	0		· Optic nerve hypoplasia
The state of the s	•		· Brain - Corlical altophy.
3	0		· LS plexus - Aplasia / hypoplasia lumbs.
	0		. , , , ,
	_	#	Mother get chick fon - 5 days before delivery or, c in 2 days of delivery.
	<u>~</u>		or, c in 2 days of delivery.
	•		√
	0		Baby Chicken pox illness.
			V
1	0		Prevention: Varicella Zoster Ig to the baby.
	0		
	0		even after 120 hrs of exposure.
	0		
	0	4	Pregnant; HBsAg +ve: no gaundice
	0		HBe Ag +ve => 90% chance baby is carrier
	0		& laler en life Portal hypertension
1	0		
	0		Ascifes, Spleenounegaly, Varices
1	<u> </u>		•
	O		HBeAg -ve ⇒ Anti HBeAg+ve
-	<u> </u>		HBeAg -ve ⇒ Anti HBeAg. +ve then 10% chance of Vertical transmission
-	0		
	0	'	# Give HB19 baby to 12 brof life HBV vaccine to baby E in 24 hrs of life.
1	0	-	4BV vaccine to baby c in 24 hrs of lefe.
	Ō	<i>J</i> J.	Pricked by UR. As the bolish
	0	#	Truckey by TOS TO TWE PURENT
	0		Pricked by HBs Ag + ve patient Are you innumized ? Androtto ag · Anti HBs Ab tilre Good > 10 m 10/cml; High risk > 100
	Ò		Good > 10 m 11/1/1 : High sink >100
	Ö		9000 / 10 00 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	•		

	1	
	. 40	•
	Page	٥
	Incomplete vaccination / Not know titre	۵
	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	0
	HBV + HBIg	0
	afc lo CDC guidelines.	•
	It tilse is good - don't do anything	
	If tilte is good - don't do anything.	_
#	'CDC' HBV DNA load > 1000 IU/III	
	→ Can't goin Surgecal branch	
	. /	
	Neonatal gaundice	0
_	· · · · · · · · · · · · · · · · · · ·	•
	Heam	•
_	Hemooxygenase Et Co hemolysis.	è
	Bilwerdin Metalloporphyrun	0
	1 3. reductase	•
	Bilirubin	8
	4- 11 - 2/ 1 6:15:11	0
	1900 of Hb = 34 ong of bilirubin	•
	19m/Sel Albemin Dinds to 8 mg bilirubin	<u> </u>
	- Unconjugate bélirubin passes BBB& cause jaundice & Kernicherus.	
	- Ju 1st Zwki, BBB is not developed properly.	
	- (N) S. Albuman = 3.5-5.59/dl	_0_
	- Heatthy leren baby can beind 24-25 vorg/d1 bilinus	-© -
	- Sick, preferen, risk factors can go into early	<u> </u>
	Kerdieterus.	0
	- In adults ammonia cross BBB in hepatic	0
	encephalopathy.	•
	- HealthyBaby (<1000g) -> We start photo therapy (5-7mg/d1)	•
	Bilirubin	0
	Sick baby -> Bilirubin (4-6mg/dl) - we start	•
- 11	photosherapy.	

		/	
1			Date
-	0		Paga
			Bilirubin
	0		✓
i de	0		Uptake by liver (Y-ligandin uptake)
	0		
	0		Conjugation UDP-glucoronyl-t
I	0		
I	<u> </u>		Enlero Excrelion
			repare
			Stools
	0		# > 2-2.5 mg/dl in adull => Yellow Sclera.
N. C.	0		
			Krammer's zone:
N			progression of gaundice in new born is
	0		Cephalo-caudal
	0		(Bi/irubia)
	0		Zone I (5 mg/dl) \rightarrow
	0		Zone 11 (10 ing/dl) ->
N. C.	0		Zone III (12 mg/dl) ->
	0		Zone IV (15 mg/dl) ->
	0		Zone V (>15 mg/dl) -> Danger Zone.
	<u> </u>		> Danger Zone.
			V
	0		6 causes of physiological gaundice:
		0	6 causes of physiological gaundice: Life span of RBC is less. Hemotocrit more
	0	2	Hemátocrit more
5	0	<u>(\$)</u>	Newsorn deficient in Y-ligandin. UDP glucuro nyl-t deficient in newsom. Excretion reduced.
5	0	<u>(4)</u>	UDP glucuro nyl-t deficient un newborn.
	0	<u>(S)</u>	Exeretion reduced!
U		<u>(6)</u>	Enterchepatic circulation 1.
	0		•
I	0		
	0		
0	0		

		٥
	Date	0
		_
	Physiological gaundice:	•
	gaundice en leru babies.	_0
	Physiological gaundice: jaundice en lerun babies. peak → upto 12 ong/dl. → (1) in term.	_
		_6
_		
	Day3 Day7	_0
		_0
		<u> </u>
	Prelevus - have more gaundice.	
$-\parallel$	<u> </u>	6
_ _	upto 15 mg/di. → @ in prelerm.	•
		-0
	1.	
	Days 2Wks	0
	<u> </u>	0
	Pathological jaundice:	
	- Hemoystic.	
- -	M/c/c - Incompatibility Rh/ABO LO mother; baby Af	B
	- RBC memb defect.	•
	M/c/c - Incompatibility Rh/ABO [Omother; baby A) - RBC memb defect RBC enzyme defect.	
		_(
	Def: jaundice è in 24 hrs of life.	_6
		_6
	* Rh-ve molher; previous aborlions	<u> </u>
	we take corb blood Samples.	_
	- Rh status of baby>9/+ve - 46 -> 10 mg/cll	-
	- 46 → 10 mg/dl	
	- Bilirubin -> 5mg/cil	
	- Peripheral Surear (P/s) +100	
	7 000000 00000 (1/5)	pt la
	- Direct Coombis test (DCT) → +ve	0
	- Direct Coombis test (DCT) → +ve / means Severe hemolysis	0

Y	0	
	9	
1	•	0ate
	0	R > Exchange transfusion at birth.
	0	The state of the s
	0	# D saundice & in 24 hrs of life.
4	0	# (1) Jaundice & in 24 hrs of life. (2) Reaching 20mg/dl (3) Rate rise > 0.2mg/dl/hr.
	0	3) Rate rise >0.2mg/dl/hr.
	0	4) Persisting beyond
		4) Persisting beyond - I wk terms
		- 2-3 whe preferm.
		3 Clay stoole.
	•	Photo/herapy:
	•	- Any gaundice on day 1 of life start photo therapy.
	0	- Any gaundice on day 1 of life start photo-therapy- Serum believebin cut off.
		Photo/herapy Exchange transfusion
	Ö	Photo [her aby Exchange frankfusion Healthy babies Babies c RfF Healthy babres Babies c RfF Day 1 Any visible roundice > 260(15) 220(10)
	0	Way -
	0	Day 2 260(15) 170 (10) 425 (25) 260(15)
	٥	Day 2 260(15) 170 (10) 425(25) 260(15) Day 3 310(18) 250 (15) 425(25) 340(20)
0	0	
0	Ø	R/F (1) Gestation (35 wks: / wt. (2kg.) (2) Sepsis (3) Hemolysis (4) Asphaxea (5) Sick baby.
O	_ <u>Ö</u>	2 Sepsis
0	<u> </u>	(3) Hemolysis
0	_0	(4) Asphaxea
	-0	Sick baby.
0	Ö	
1	0	Principle: - Structural isomerazation
2	Ò	'- Structural isomerazation
		* BULLIUGUN -> COMIROSIN
	0	- Photo isomerization
	0	- Photo isomerization · 4215Z
	•	- Minor palheray → photo-oxidation. 40 cms away, falls @ 4-6 mg/dl/day.
	0	40 cms away, falls (& 4-6 ing/dl /day.
	0	

	N.		
	44	0	. (
	Date	Ö	
	Photo Handry provided the files	Ö	
	- Phototherapy occurs at 425-475 nous of blue green light.	0	•
	- Irradiance → 6 micro Watt/cm²/mm	a	-
	- Intensive > 30 micro watt/cmynm.	<u> </u>	
	Jim Grozardy 30 warmy car print	6	
D	AIIMS Nov. 2013	_	4
	Which does not effect the efficacy of phototherapy?	~	
	A) Types of photo therapy laws.		
	185 Sken pigmentation:	-0-	١.
	c) Spectral radiance of wicident light	0	
	D) Initial bilirubin levels.	0	1
		•	
#	Complication:	Ő	
-//	- Hyperthermia; insensible losses	9	
	- Hypocalcenia 2	0	Constitution of the last
	- Diarrhoea.	9	
	- Cover eyes & genifals Resident damage	•	A
*	· Refinal damage	6	and the last of th
	· Mufations.	•	-
	- Phototherapy is GI in conjugated gaundice	8	
		0	ľ
	Bronze baby Syndrome.	Ö	-
	Bronze baby Syndroine. (Skin, Vrine).	6	-
		()	-
	Exchange Transfusion:	-	Street, Street, or
	Double voleture exchange transfusion.		The same of the last
	# Blood vol. of new born = 80 m1/290 =	•	-
	→ 2×80 mV/kg = 160 ml/kg.		-
	- Transfur Fresh (< 7 days) whole blood.		-
	- Reduces biliriebin by 85%	•	-
	√	•	-
	Not 100% because bilirubin is also in fissue.	٥	-
		6	1

	7	
11/	0	
I	•	. 45
	•	Date
	0	· Albumin 1 efficiency.
	•	00 8 00 0
	0	Complications:
0	•	Complications: - Infections
6	0	- ACD (Acid cultate dexhibse)
	0	↓
	0	Becarbonates
	•	/wole of ciliate -> 3 mole of Bicarbonate.
-	•	
	•	- Metabolic alkalosis
	•	 - Hypokalenna, hypokalenna. - Old blood → Hyperkalenna, metabolic acidosis.
	0	- Old blood → A yperkalenna, mejabolu acidosis
6	•	Por sistant saun dica:
6	6	Cause - Hypothurodisin
6	0	Persistent jaundice: Cause — Hypothyrodisin - Breast wilk jaundece Heurstoma (Ceshalhematoma IVH)
6	٥	Heuratoma (Cephalhematoma, IVH)
	0	č Clay colour stool (Cho/estasis)
	9	Crijster - Najjar Syndrowe type II (Milder form
	0	-> deficiency of UDP-glucurony1-t
7	0	0 0 0
0	0	# Criggler-Naggar Syndrome type 1 - Very Severe
6 0	- Ò	# Criggler-Naggar Syndrome type 1 - Very Severe \$\to\$ Absent UDP-glucuronyl-t:
Q_	•	
	Ó	Pathological jaundece
	0	Breast wilk jaundice Breast feeding gaundice.
9	Ó	- Onset - day 14 - Onset - Day 3.
	0	- Some mother have pigment - In priningravida.
	0	- Day 14 = 20-30 mg/dl hepatic circulation.
	0	- May Kernicterus.
	0	- Persists 4-6 wks.
	6	

		0
	46	•
	Date	0
		0
	R: Temporary interrupt R: Ensure feeding.	0
	Meanwhile give	0
	formula milk.	<u></u>
		<u> </u>
9	True about jaundice en new born (neonates) is -	
	12) Can be seen after Ventouse delivery.	-0-
	B) Physiological jaundice seen è in 48 hrs of berth.	-
	c) Increased conjugated vilirubin leads to kernicter	14
	D) Breast milk Jaundice is max in 7 days of birth	4
		0
	Neonatal cholestasis:	<u> </u>
	Neonate, jaundice & Clay stoole. - Direct bilirubin > 2 mg/dl or > 20% lotal bilirub	-
	- Direct bilirubur > 2 mg/bll or > 20% lotal bilirub	in
		_
	Medical - Common . Surgical - Extra hepatic Neonatal hepatitis→CMV biliary alresia (EHBA)	9
		6
	Sepsie R- Kasai's surgery E un	0
	Galactosenia Swks of life otherwise	•
-	d-1 antitrypsin deficiency. 20% Gie. Neonatal hemochromatosis.	0
_		_0_
	M/c/c indication of	۵
	liver transplant in babies	-0-
$-\ $	→ EHBA.	<u> </u>
10	Which is an aminous time in a ladau ald wonten ?	0
7	Which is an ominous sign in a 10day old newborn?	6
	A) Unconjugated hyper bilirebinemia	0
	c) Tailure to gain wt.	0
	c) failure to gain wt. D) Doll's eye reflex L) Normal in 1st 10 days of life.	0
	Ly Normal in 1st 10 days of lite.	0
		0
		0
		-

0	GGT → Gamma Gutamye transferase.
0	47
0	Date
0	Medical - Common Surgical - EHBA
0	- GGT len luites higher en
0	Surgical causes.
0	- Do USG → Shows Intra
0	hepatic biliary radicle (1488)
0	are dilated.
-0-	- Iriangular cord Sign &
10	0 0
10	- HIDA nuclear Scan:
	HIDA dye not seen in gut, even
	in delayed emages; white en
	hepatetis excretion of dye.
	D 0
	Best lest - Liver biopsy.
0	<i>√</i>
0	Show dilatation & proliferation
0	of intra hepatic bile duct.
0	
0	# Before doing HIDA Scan we have to give phenobarbitone
0	we have to give phenobarbitone
0	2 to 3 days before test.
0	
0	Gold Standard - Pre operative
0	Gold Standard - Pre operative Cholangiography.
0	
0	Alagille Syndrome-
0	- Cholestasis
	- AD
	- Bile duct paucity Syndrome.
0	- Bile duct paucity Syndrome. - M/c heart disease -> Peripheral pulm. Stenose's.
0	
0	Rubella
9 6	

	48	
	Date	0
Q.	1 moulti old child present à conjugated bélirubineme	0
	& intrahepatic cholestasis. On liver biopsy staining	0
	TO PAS, red coloured granules were seen inside	•
	the hepatocytes. Probable diagnosis is -	0
	A) d-1- antilry psin deficiency.	0
	B> Congenital hépatic fibrasis	
	c) Hemochromatosis	0
	D) Wilson's ds.	<u> </u>
_		<u> </u>
	# CMV - Intranuclear Owleye inclusion bodies.	0
	V	fin-
	Galaclose -> Galactitol (Cataract)	•
	I Galactokinase	6
9	alactore-6-phoxp (Galaclose -1-phosphate (Hepatotoxic)	0
_		0
_	Glucose - 1 - phosphate	
	Galactose -1-	8
	phosphate wridge Limit dextrin	٥
	transferase \$	•
	y gracegen	Ö
_	Def. cause Galactosemia UDP glucose	_0_
	$(95)^{\circ}$	<u></u>
	UDP galactose.	_0
		0
	- He get gaundice, bleeding, hypoglycaemia, PTM Galactitol cause cataract - R - Lactose free milk.	Ö
	- R - Lactose free milk.	
	D	0
	- Galactok mase deficiency - Only cataract	
	V No liver failure	0
	- Fructokinase def> Causes Benign Fouctosuria 4 No Symptom.	•
	4 No Symptom.	0

4		1	
C			Tructore 1 - phosphate leads to liver failure.
	0		Date
C	•		Page
	•	Q.	M/c/c of Neonatal Cholestasis:
		=	A) EHBA
(6)	0		BY Neonatal hepatitis
6	0		c) Choledochal cyst.
6	0		D) Physiological
	0		
	_	Ø.	Neonatal chofestasis seen en-
1	-	7	A) Chronic hepatitis (>Guranth)
1			B) Hep. B
			et Galactosemia
0			D) Rh un compatibility (cause a unconjugated jaundio
4			, , , , , , , , , , , , , , , , , , , ,
6	•	Q	Pregnant lady, HBs Ag +ve, No joundice
6		=	
0	•		next Step > HBeAg
0	•		7
0	3		 HBeAg +ve (90%) Carrier HBsAg → Portal HTN
Q Q Q Q	0		Carrier HBs Ag -> Portal HTN
0	1		V
G	Õ		Iriad - Ascetes
0	Ø		Iriad - Ascêtes Spleenomegaly Varices.
0			Varices.
0	_0_		
0			• HBe Ag -ve auti HBe AG F \$\to\$10%
0	-		auti HBe AG (f)
	0		110 To 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
			Immunization THB I g-baby c en 12tres of life 1 HBV - baby in 24tres of life prevent Vertical iransmission
I	0		- HISV - Saby in 24hrs of life
	•		prevent Vertical Transmission
	0		,
	0		

CDC quidelines: # Pricked by HBS Ag @ patient Are you munized? Y Ank HBS Ab titre Gaod > 10 m W/ml High risk > 100 m W/ml Don't knew titre -> Incomplete HBV + HB Ig If Good titre -> Nolhing is to be done 9.			
# Pricked by HBS Ag @ patient Are you invunized? Anti HBS Ab titre Good > 10 m W/m High rish > 100 m W/ml. Don't knew titre -> Incomplete HBV + HB Ig Af Good titre -> Nothing is to be done			•
Are you innumized? Anti HBs Ab tilte Good > 100 m lu/ml High risk > 100 m lu/ml. Don't know tilte -> Incomplete HBV + HBIq Good tilte -> Nothing is to be done		CDC quidelines:	٥
Are you innumized? Anti HBs Ab tilte Good > 100 m lu/ml High risk > 100 m lu/ml. Don't know tilte -> Incomplete HBV + HBIq Good tilte -> Nothing is to be done	#	Pricked by HBs Ag @ patient	0
Anti HBS Ab litre Good > 10 m lu/ml High risk > 100 m lu/ml Don't know litre -> Incomplete HBV + HB Ig 3f Good tilre -> Nothing is to be done Q. O			•
Anti HBS Ab litre Good > 10 m lu/ml High risk > 100 m lu/ml Don't know litre -> Incomplete HBV + HB Ig 3f Good tilre -> Nothing is to be done Q. O		Are you inmunized?	0
Good > 10 m 10/ml High risks > 100 m 10/ml. Don't know litre -> Incomplete HBV + HB Ig If Good tilre -> Nothing is to be done O.			•
High risk > 100 m 10/ml. Don't know litre - Incomplete HBV + HB Iq If Good tilre -> Nothing is to be done O			0
Don't know titre -> Incomplete HBV + HB Ig If Good titre -> Nothing is to be done O O O O O O O O O O O O O			-0-
HBV + HB [q If Good tilre > Nolhing is to be done If Go		High risk > 100 m 20/201-	_0_
HBV + HB [q If Good tilre > Nolhing is to be done If Go			<u> </u>
HBV + HB [q If Good tilre > Nolhing is to be done If Go		Don't know tetre -> Incomplete	-
		V	6
		413V + H13 L9	0
		y Good tilre → Nothing is to be done	Õ
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4	•	Date	
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		New born, Respiratory distress: Neonatal Seizures:	
4	0		
6	0	Neonatal Seizures:	
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Neonatal hypoglyceuna: Neonatal hypoglyceuna: - dimited stores > Preterm, 10GRé - Stress > Sepris - Palycy Themia - Galacreseuna - liver failure Low cortisol - Chyl (Congenital Adrenal Hyperplans) - Hypopituitarism - Low ACTH; low the FSH > Micropenis Hyperinsultinsur - In infants & diabetic mothers - Hyperinsultinsur - In infants & diabetic mothers - Foetia & B-cell hyperplasia. - Joshus Blood glacase & Pederson's hypotheris - Insulinsura; Nesidio blasteris - Beckwith weidman syndrome Hemi hyper trophy of limb - Macroflossia Kisk of wiloni		. 52	Ò
Causes: - dimited sloves > Prelevin, IVGR's - Stress > Sepsis - Polycy / Fremia - Galactesemia - liver failure - Low corlisol - CAH (Congenital Advenal Hyperplasis) - Hyperinsulinism - Micropenis - Hyperinsulinism - In infants & diabelia mothers - Hyperinsulinism - In infants & diabelia mothers - Joelin & B-cell hyperplasia - Joetus Blood glucose V - Pedersom's hypothesis - Insulinoma ' Nesidio blastosis		/ //\ \ \ \	٥
Causes: - dimited sloves > Prelevin, IVGR's - Stress > Sepsis - Polycy / Fremia - Galactesemia - liver failure - Low corlisol - CAH (Congenital Advenal Hyperplasis) - Hyperinsulinism - Micropenis - Hyperinsulinism - In infants & diabelia mothers - Hyperinsulinism - In infants & diabelia mothers - Joelin & B-cell hyperplasia - Joetus Blood glucose V - Pedersom's hypothesis - Insulinoma ' Nesidio blastosis	~	eonatal hypoglycemia:	0
- divited stores - Preterin, 10GR's - Stress -> Sepsis - Polycy / Fremia - Galactosemia - liver failure - Low cortisol - CAH (Congenital Advenal Hyperplasia) - Hypopeticitarisin - Low ACTH; Low LH/FSH -> Micropenis - Hyperinsulinisin - In infants c diabetic mother - Hyperinsulinisin - In infants c diabetic mother - Foetus Blood glucose V - Pedersom's hypothesis - Insulinoma ' Nesidio blastosis			•
- divited stores - Preterin, 10GR's - Stress -> Sepsis - Polycy / Fremia - Galactosemia - liver failure - Low cortisol - CAH (Congenital Advenal Hyperplasia) - Hypopeticitarisin - Low ACTH; Low LH/FSH -> Micropenis - Hyperinsulinisin - In infants c diabetic mother - Hyperinsulinisin - In infants c diabetic mother - Foetus Blood glucose V - Pedersom's hypothesis - Insulinoma ' Nesidio blastosis			0
- divited stores - Preterin, 10GR's - Stress -> Sepsis - Polycy / Fremia - Galactosemia - liver failure - Low cortisol - CAH (Congenital Advenal Hyperplasia) - Hypopeticitarisin - Low ACTH; Low LH/FSH -> Micropenis - Hyperinsulinisin - In infants c diabetic mother - Hyperinsulinisin - In infants c diabetic mother - Foetus Blood glucose V - Pedersom's hypothesis - Insulinoma ' Nesidio blastosis			٥
- divited stores - Preterin, 10GR's - Stress -> Sepsis - Polycy / Fremia - Galactosemia - liver failure - Low cortisol - CAH (Congenital Advenal Hyperplasia) - Hypopeticitarisin - Low ACTH; Low LH/FSH -> Micropenis - Hyperinsulinisin - In infants c diabetic mother - Hyperinsulinisin - In infants c diabetic mother - Foetus Blood glucose V - Pedersom's hypothesis - Insulinoma ' Nesidio blastosis			•
- dimited slores - Prelevin, 10GR's - Stress -> Sepsis - Polycy / Frema - Galactosemia - liver failure - Low cortisol - CAH (Congenital Advenal Hyperplania) - Hypopituitarisin - Low ACTH; Low LH/FSH -> Micropenis - Hyperinsulinisin - In infants c diabetic mother - Hyperinsulinisin - In infants c diabetic mother - Foetus Blood glucose V - Pedersom's hypothesis - Insulinoma ' Nesidio blastosis			0_
- dimited slores - Prelevin, 10GR's - Stress -> Sepsis - Polycy / Frema - Galactosemia - liver failure - Low cortisol - CAH (Congenital Advenal Hyperplania) - Hypopituitarisin - Low ACTH; Low LH/FSH -> Micropenis - Hyperinsulinisin - In infants c diabetic mother - Hyperinsulinisin - In infants c diabetic mother - Foetus Blood glucose V - Pedersom's hypothesis - Insulinoma ' Nesidio blastosis			
- dimited slores - Prelevin, 10GR's - Stress -> Sepsis - Polycy / Themia - Galactosemia - liver failure - Low cortisol - CAH (Congenital Advenal Hyperplania) - Hypoperfuitarisin - Low ACTH; Low LH/FSH -> Micropenis - Hyperinsulinisin - In infants c deabelic mother - Hyperinsulinisin - In infants c deabelic mother - Foetus Blood glucose V - Pedersom's hypothesis - Insulinoma ' Nesidio blastosis			
- Stress - Sepsis - Polycy / Ferma - Galactosemia - liver failure - Low cortisol - CAH (Congenital Advenal Hyperplasia) - Hypopitaitarism - low ACTH; Low LH/FSH -> Micropenis - Hyperinsulinism - In infants c diabetic mother - Hyperinsulinism - In infants c diabetic mother - Foetur Blood glacose t Pederson's hypothesis - Insulinoma ' Nesidio Hastosis	Cae	wes:	
- Stress - Sepsis - Polycy / Ferma - Galactosemia - liver failure - Low cortisol - CAH (Congenital Advenal Hyperplasia) - Hypopitaitarism - low ACTH; Low LH/FSH -> Micropenis - Hyperinsulinism - In infants c diabetic mother - Hyperinsulinism - In infants c diabetic mother - Foetur Blood glacose t Pederson's hypothesis - Insulinoma ' Nesidio Hastosis		- dimited slores → Preleru 1VGR's	
- Polycy / Femia - Galactosemia - liver failure - Low corlisol - CAH (Congenital Adrenal Hyperplasia) - Hypopeticitarism - low ACTH; low LH/FSH -> Micropenis - Hyperinsulinism - In infants & diabelia mother. - Hyperinsulinism - In infants & diabelia mother. - Foelia & B-cell hyperplasia - Joetus Blood glucose V Pedersom's hypothesis - Insulinoma, Nesidio blastosis		· Stress -> Sepsis	•
- Galactosemia - liver failure. - Low corlisol - CAH (Congenital Advenal Hyperplasia) - Hypopituitarism: - low ACTH; low LH/FSH -> Micropenis. - Hyperinsulinism - In infants c diabelic mother. - Goetus c B-cell hyperplasea. - Joetus Blood glacase l Pederson's hypothesis - Insulinoma, Nesidio blastosis	-		•
- Low cortisol - CAH ("Congenital Advenal Hyperplasia" - Low ACTH; Low LH/FSH -> Micropenis. - Hyperinsulinism - In infants c diabetic mother. - Hyperinsulinism - In infants c diabetic mother. - Hoetus c B-cell hyperplasea. - Joetus Blood glacose V Pederson's hypothesis - Insulinoma, Nesidio blastosis			0
- low ACTH; low LH/FSH → Micropenis. - Hyperinsulinism - In infants c déabelic mother. - Hyperinsulinism - In infants c déabelic mother. - Poetie c B-cell hyperplasea. - Poetie Blood glacoie V - Pederson's hypothesis - Insulinoma, Nesidio blastosis	_	Low corlisol - CAH (Congenital Adrenal Hype	rblasia)
- low ACTH; low LH/FSH → Micropenis. - Hyperinsulinism - In infants c̄ deabelic̄ mother. - Hyperinsulinism - In infants c̄ deabelic̄ mother. - Poetice c̄ β-cell hyperplasea. - Poetice Blood glacose l - Pederson's hypothesis - Insulinoma, Nesidio blastosis		. Hypopeteintarisin	1
Pederson's hypothesis - Insulinoma, Nesidio Hastosis	_	low ACTH; low LH/FSH -> Micropenis.	0
Pederson's hypothesis - Insulinoma, Nesidio Hastosis	_	Hyperinsulinism - In infants & déabelie n	uo/her.
Pederson's hypothesis - Insulinoma, Nesidio Hastosis		4 foeling & B-cell hyperplanes.	0
Pederson's hypothesis - Insulinoma, Nesidio Hastosis		V	
Pederson's hypothesis - Insulinoma, Nesidio Hastosis		Fortus Blood glacose V	
		1	
		Pederson's hypothesis	
- Beckwith weidman syndrome. - Hemi hyper trophy of limb - Macroglossia - Risk of wilonis - Hyperinsulinism	_	Insulinoua, Nesidio Hastoria	
→ Hemi hyper trophy of limb → Macroglossia → Risk of wilonis → Hyperinsulinism	_	Beckwith weidman sundrame.	
→ Macroglossia → Risk of wiloné → Hyperinsulinisur		> Hemi hyper trophy of limb	
Lyperinsulinism Hyperinsulinism		- Macroglossia	<u>Ö</u>
Hyperinsulinisur Output Hyperinsulinisur Output Hyperinsulinisur		Ly Rink of wilmie	0
		→ Huper insulinism	
		The second secon	8
			Č
			6

14			
	0		
J			53
6	0		Data
	0	Ø.	A term baby to a diabelic mother, few hours after
			birth was lethargic & his blood gluesse was 30 mg/o.
(C	0		what should be done next-
6	0	_	A) Give 10% dextrose oally.
0	0		By 10% dexerose i.vBolus 2myrg -> Glucose drip
0	0		C) Give expressed breast wilk GIR
(6	_		D) DO exchange transfusion. 6-8 mg/kg/min
6	-0-		0
(6	-0-		A1
6			Neonatal hypoglycemia:
(C			Symptomalie Asymptomalie
	0		→ Bolus 2ml/kg 10% dextrose → Blood glucase < 20mg/kg
(6	0		Symptomalie Asymptomalie Asymptomalie Asymptomalie Asymptomalie Asymptomalie Asymptomalie Asymptomalie Asymptomalie Blood glucose < 20mg/kg fly Glucose drip 6-8 mg/kg/min Glucose drip (6-8 mg/kg/min)
C	0		6-8 mg/kg/min Glucose drip (6-8 mg/kg/min)
6	0		
6	0		→ Blood glucose = 20-45 mg/dl
9	0		V 0
	0		Breast feed; I holy.
			U
(0	#	A baby of glucose drip & he gets serzures
			how to 1 glucose rate
9	_0_		A baby of glucose drip & he gets seizures how to 1 glucose rate - Upto 12-5% Urrough peripheral vein.
	0		# Max 300 alucase interior rate (GTR) = 12 mod rating.
	0		# Europaenou drug = i.m. Glucason.
			# Max son glucose infusion rate (GIR) = 12 kg/min. # Emergency drug = i.m. Glucagon. for hypoghyremia
			Glycogenolysis
I	0		+ Gluco neogenesis.
	0		V
	•		
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	54		
	Page	0	- 1
- R	Gugon is effective for Mx in persistent hypoglycemia	2 0	- 1 - 1
#	in all bencept.	•	- 4
	A) large date for baby.	(- 1
	B) Nesidio blas tosis	9	- 1
	(c) Galactosemia	Ö	- 1
	D) Infant of déabelie molher.	_0_	į `
	0 0	_0_	-
<u>Q.</u>	1 y r old, hypoglycemia & hepatomegaly	-	
	No gaundice	0	
	Hypoglycemia does o't respond lo glucagon.	6	'
	V	0	
	△ → Von Gierke's (Glycogen Storage ds - I)	0	
	Glucogen Glucose -6-PO4	0	
		٥	
-	Von Gierkes Stacose - 6- phosphatase.	9	1
	Glucose	٥	
	Types of Glycogen slorage disorder:	0	1
	V' = Von Gierke's -> Liver primary	0	-
	P = Pompes de -> Heart primary; Cardio megaly.	٥	(
	P = Pompés ds \rightarrow Heart primary; Cardio megaly. C = Cori \rightarrow Debranching enzyme. large QRS complexes. A = Anderson \rightarrow Branching ", edeticionary M = Me Anderson \rightarrow Branching blanching actionary	0	4
	A = Anderson → Branching " edetectioncy	0	(
	11/ Mr. Arilles - Missile prosprosguse defilienty.	_0_	1
	Hardung =	•	(
	Ton 0=	Ö	4
	# gaundice never occurs in Chicagen Storage de.	0	(
	# gaundice never occurs in Glycogen Storage d.s.	0	1
	# Ry pompés: Euzyme replacement Cherapy.	0	1
	, , , , , , , , , , , , , , , , , , , ,	6	1
	Euzyme absent in pompés -> Lysosomal d-1,4-glueosidase - Also called Acid & neutral maltose.	0	4
	- Also called Acid & neutral maltase.	•	1
i i			

		55
7	•	Data/
	0	Muscle affected en GSD:
	0	Muscle affected en GSD:
	0	
	0	
	0	
The same of	6	
CLA	0	Calcium:
(19)	-	M S. $Ga^{2+} \rightarrow 9-11 \text{ mg/dl}$.
0		Neonatal hupo calcemia:
100	0	· S. Ca2+ & Fung/dl
(To	0	Neonatal hypocalcemia: S. Ca ²⁺ / Jung/dl Besse Best index of body Calcium
	6	0 1
(((0	Ionized < 4 mg/dl (on < 1 mmol/L
	9	
(0	•	- Jetany is rare en infants. - Joemors, seizures, gitteriness. □ Freuwlousness ⊆ is
TO	0	- Toemors, seizures, gitteriness.
C	•	G Tremulousness ⊆ is
	0	Slimilus sensilive.
	•	Stimulus sensitive. San stop on passive restrain.
	0	restrain.
0	0	
		Early Hypo Ca2+ Late Hypo Ca2+
W.	D	Early Hypo Ca ²⁺ Causes - Premalurity Cause - Freding & phosphale Asphysia rich milk (Cow milk)
O	-0	Asphyxia rich milk (Cow milk) Infant of DM mother- Jest:
0	-0-	Infant of DM mother.
	0	Geot:
	0	Blood glucose
	0	Blood glucose + S. G2+ & S. Mg2+
1	0	
3		# Good Ca ²⁺ Supplement (Ca ²⁺ /P > 2) 100 ml Cow milk Breast milk
4	0	
	0	Ca 118 mg 34 mg PD4 100 mg 15 mg
	D	PO4 100 mg 15 mg

	56	
	Date Page	0
	Advantages of Breast wilk:	•
	- protects against late onset hypocalcemia.	0
	- protect against pneumonia	0
	NEC (Necrotizing Eulerocolitis).	•
	Allergy Eczema, asthura.	0
	Rota virus diarrhoea.	
	Bronchiolilis (IgA-RSV)	
		•
2.	Milk deficient en: a) Iron & Vit. C	ě
	a) Iron & Vrt. C	6
1	Arrant willing a series of the	
9	Breast wilk has enough eron & vit. C for Emouths.	6
-		0
	:. Sauvy never occurs in 6 mouth of life.	_
N	Il bake on acclusing breadless for 2	
3.	If baby on exclusive breastfeed for 2yrs.	_
	Ison deficiency anguia:	
	Iron deficiency ausuria.	6
a	APP recommends Vit. Lo all infants - Vit. D drops.	8
2	- RDA vit. D infant 400 [U/Slay	
	- RDA vit.D infant 400 [U/Stay - Breast wilk 25 [U/L.	
	M/c/c of Hypo Ca2+ in infants = Malernal deficiency	
_	$M/c/c$ of $Hypo Ca^{2+}$ in infants = Malernal deficiency of $Vit\cdot D$.	
		-
$-\parallel$	25 [OH] Vit. D = Status.	9
$-\parallel$		-
		0
11		•
		0

1		
9		
9		57
3	•	Data!
5	0	Infant of DM mother:
6		- Can be stillborn; prelerin
		- Macrosomia
a	0	G BCOZ of Hyperusulinism
	0	- Linear growth in ulero depend upon insulin & or
	0_	- Linear growth in ulero depend upon insulin & or Insulin like growth factor: - IUGR → While's classification class F/R
	_0	- LUGR → While's classification class F/R
0	-0-	mother -> Placental Vasculopathy.
		- Hypoglycemia sia
		- Hypo Ca ²⁺ , Hypo Mg ²⁺
	•	- Neonatal gaundice
		- Polycythemia → Renal Vein Chrombosis (RVT)
6	0	
C	• g	Att. Not seen in infant of diabelia mother:
	0 2	
0	•	Hyperglycemia.
6	•	
6	0	Anomaly:
	0	(M/c)-CVS - 8.5% [VSD; HOCM] Assymetrical septem
0	0	- Neural tube defect → 5% hypertrophy.
6	0	- Lazy left colon syndrame -> Pseudoobstruction of
Ĉ.	_	- Sacral agenesis/Caudal regression Syndrome
	0	· Most specific.
118	0	ALCONAL THE C ACCECT (NTD)
6	0	NEURAL TUBE DEFECT (NTD)
000	0	Ant neuropore -> closes at 25 days of 10L
0000	0	Ant neuropore -> closes at 25 days of 10L
888		Ant neuropore -> Closes at 25 days of 10L of closure -> Anencephaly failure Causes NTD Enceptalocoele
ABBBBBB	0	Ant neuropose -> closes at 25 days of 102
3 3 3 8 8 8 8 8	0	Ant. neuropore -> Closes at 25 days of 101 of closure -> Anencephaly Failure Causes NTD Encephalocoele
B B B B B B B	0	Ant neuropore -> Closes at 25 days of 10L of closure -> Anencephaly failure Causes NTD Enceptalocoele

	58	
	Date Page	0
	Aneucephaly:	0
	- Ant newropore fails to close.	0
	- No brain, absent of part of hind brain.	0
	- Earliest abnormality diagnosed by USG	0
	(10-12 cvks)	0
	of gestation.	0
	- Most Severe NTD	0
	- Don't resuscitate	_
	- Mostly post-term.	_
.	0 7	
	Hernialion of brain tessue - Encephalocoele.	0
		0
	Lumbo-sacral myélomeningocoele:	
	Complication:	0
	- Paraplegia / Paraparesis	0
	- Neurogenic bladder -> CKD.	0
	- Constipation (Severe)	0
	- Associated hydrocephalous (Obstructed)	0
	1	4
	Bcoz of Arnold-Chiarri lupe II maltormate	n A
	Bcoz of Arnold-Chiarri lype II malformate	110
	MRI Brain	
	Ruptured myelomeningocoele:	
	Best test - Blood cullure.	-
	- Cours a Manual saling Souled Course	-0
	- 95% of permatal manifestio hour lander	
	M/c/c of meningonnelocoele - Inlin Acid delicione	
	- 95% of neonatal meningitis have Leukemia. M/c/c of meningomyplocoele - Jolic Acid deficience	7-
	•	0
		<u></u>

6 6	2	
1	0	
	•	59
	0	Date
0	0	Polic acid deficiency:
	•	-1/+3 months conception - Start folic acid
	0	· 400 mcg gwen.
	9	
1	0	Recurrence:
1	-0	1 child - 3.5% chance
I	0	2 child - 10 %
-	-Ö	3 child - 25%
9		Jo prevent recurrence → Folic acid 4mg
	•	, , , , , , , , , , , , , , , , , , ,
0	•	reduces risk by 75%.
C	•	
6	9	$\Delta: O \cup SG$
	•	2) Amorio centesis
G	0	→ Acelyl cholinesterase
	•	& d-Jeloprofein are markers.
	0	# d-feloprofein in molher serum is marker of Neural tube defect.
	•	of Neural tube defect.
C	0	
	0	Resuscitation:
		NRP Guidelines 2015:
61		T = Jemp ^r A = Airway: position neck, suclion B = Breathing
	-0	A = Airway: position neck, success
	0	B = Breathing
	9	C
	0	assels
	0	
	•	(30 sec)
		- dim
1	0	pelion
	0	
5		Γ

	60	٥
	Date Page	0
	Indication of Bag & mask & 100% Oz:	0
	· Aprea/ gasping after after initial steps.	•
	· Apned/gasping after after initial steps. · HR < 100/min after 30 sec PPV.	0
	· Central cyanosis despite 100% 02.	•
		0
	· Chest compression if HR < 60/min, falling after	0
	30 sec PPV.	
	· Chest compression: Bag mask = 3:1	<u> </u>
_	·	•
$-\parallel$	In 1 minute = 120 events	
\parallel	90 Chest compression of 30 bag & mask	
	Compression to Ventilalion ratio:	0
	* Children/ Infants - Single rescuer 30:2	
\bot	2 rescuer 15:2	0
		0
$\perp \parallel$	· Adulls :- 1 or 2 rescuer 30:2	6
		0
	CPR sequence -> CAB	0
		_
	Drugs for resuscitation:	-
	1) · b. 9 % Nacl 20 ml/kg boles → Shock 2) 1:10,000 epinephrine 0·1-0·2 ml/kg	
	2f HR = 0 or falling.	0
	3> I.V. NaHCO3 - documented metabolie acidoses	0
	4) i.v. Naloxone - molher opisid addiet.	
		0
#	Jargeted preductal Sp02 after birth:	
´ _	1 min = . 60% - 65%	0
11		
	2 1/ 65 - 70 %	
	Jargeted preductal Sp02 af let birth: 1 min = .60%-65% 2 " = 65-70% 3 " = 70-75%	0

0	
6	
_	Data
•	
0	4 min = 75 - 80% 5 min = 80 - 85% 10 min = 85 - 90%
•	5 min = 80 - 85%
0	10 min = 85-90%
0	
0	GENETICS
_	Holesozuach In AR carrier
-0-	→ Helerozygotes for AR carrier
O	© → Carrier for sex-linked recessive
0	V
	Death
•	1 Alaska at atillhill
0	Sex unspecified.
0	Sex anspect ().
0	Proband.
0	Consanguinous
0	marriage
0	marriage Dizygotic luin
0	
Ö	→ Monozygotic livin
•	Ú-Ú
	→ azoospermia
Ò	I O
	n → Endouvelréoses
	Ĭ.
	D → Infertility.
•	
	57-60
•	Adopted in
•	
0	DTO -> Adopted in

	0
02 Date/	
Page	6
No children for choice	0
or reason unknown	•
	Q
7 -> Vasectomy	
Q → Jubal	
I lusar	
Divorce.	
	0
7771	0
AD	0
0 0	0
	0
	•
	•
	0
Autosomal donunant:	•
D = Dystrophy unplonic -> distal ungo pathy. 0 = Osteogenesis impertecla	
M = Marjan Syndrome	
I = Intermettent porphyria	
A = Adult PKB, Achondroplasia	· •
N= NF (Neurofibromafosis)	-
T= Tuburous sclerois	0
VH3 = Von Willibrand Syndrome	
Hutington's Chorea	9
Familial Hypercholes trolemia	•
Hereditary spherocytosis.	0
	0

March .	0	
1	•	63
5	•	Paga
3	0	Turner Syndrome Noonan Syndrome.
	•	- 60% case -XO AD
3	0	- Webbed neck XX = XY
-	0	- Cystic Cygroma
()	0	- Cymphedema of hand & feet.
	0	- Primary anjenorthoea.
	0	during puberly.
17	•	- Streak ovaries
1	-0	- Cutifus valgus.
	0	- MR rare 25% MR
1	•	- M/c heart ds - Bucuspid - Valvellar pulm. Stenosis.
	0	agric value cont stenosis HOCM. 4 Half to One-third. ASD.
3	•	20% coarctation.
	•	- Girls einfertile - Girls are woodly fertile.
	.	- Girls enfertile - Girls are wortly fertile. - Boys - Cryptorchidesin. - Clotting factor deficiency.
	0	- Clotting factor deficiency
	•	
	• <u>p</u> .	Chance of child being not affected if both parents are affected \bar{c} Achondroplasia is — A) 0%
110	0 =	affected & Achondroplasia is -
	<u> </u>	C) 50% AA AAC ACA ACAC
	_0	
	0	D> 100 %
	0	
	0	
	0	Autosomal
	0	Recessive 1
	•	Recessive Recessive.
1	•	rece D
-	•	

7	•	65 Date
J	•	Pags
d	•	Enzyme Replacement Cherapy:
	0	Enzyme Replacement Cherapy: 1st to be Creat - Gaucher's ds
d	9	(B glucocerebrosidase)
	0	√
d	0	Company name - GENZYME
e	0	CER-zyme.
d		2) Pompe's
		(3) Hurler (MPS-I)
		(4) MPS-VI (Marofeux-Camy)
		(5) X-linked recessive Fabryi
I		(CNS & kidney problem)
		1
	©	Lysomal disorder.
	9	Cherry red spot macula seen.
1	0	
	•	Gene therapy:
9	•	1st to be treated by Gene Cherapy -> X-linked recessive
		Severe combined municipales. (SCID)
9	0	1st to be treated by Gene Cherapy -> X-linked recessive Severe combined minimum odef. (SCID) (Adenosine deaminase deficiency)
	©	0 0
1	0	# Brilish guy British lady
	Õ	# Brilish guy Brîtish lady Chance of Child having cyetic fibrosis
	0	
		UK/ Europe/ -> /25 carrier cystic fibrosis.
	0	askenazi jews
0		$\Rightarrow \frac{1}{25} \times \frac{1}{25} \times \frac{1}{4} = \frac{1}{2500} \qquad AA^{C} \times AA^{C}$
	0	UK/Europe/ → 1/25 Carrier cystic fibrosis. askenazi jews → 1/25 × 1/4 = 1/2500 AAC × AAC ACAC · ACA · AAC AA
	0	74
	0	# Brilish guy Brilish lady (Exother died of cyclic fisher)
	•	1
	0	Chance of chied to have cystic fibrosis ACXAGE
	•	Chance of Chied to have cystic fibrosis AACXAAC 1 X 3 X 1/4 = 150 ASCAAACAA

Northern Provided Control of Superspiratus			
XXC XY XXXC XCY XY XX XXC XCY XY XX XXC XCY XY X-linked Recessive: (Poor bood boys) - Duchenne enuscular alrophy. (Mc herectitary - Hemophilia A & B. Neuromuscollera) - G-6PD defectency. - Wiskott - Aldrich syndrome. - Colour blindness. - Lesch - Nyhan syndrome. - Chronic granulomalous disease. Duchenne muscular hypertrophy (DMH): - Pseudo hypertrophy of Calf muscle begg of fat deposition. - Proximal hunsele weakness - Gowers Sign - Not Specific. A - CPK = 10,000 IU # Valley Sign > Hypertrophy of Supraspinatus Ul Atrophy of Infraspinatus Also seen in DMH. La specific for boys who den't have calf hypertrophy.	1		0
Decrease muscular alraphy (M/c herectitary - Buchenne muscular alraphy (M/c herectitary - Hemophilia A & B. Neuromuncethan) - Colour blindness. - Colour blindness. - Chronic granulomalow disease. Duchenne muscular hypertraphy (DMH): - Pseudo hypertraphy of Call muscle beog of fat deposition. - Proximal muscle weakness - Govern Sign - Not specific. D - CPK = 10,000 IU # Valley Sign > Hypertrophy of Supraspinatus Also seen in DMH. L. Specific for boys who den't have call hypertrophy.		Date Page	•
Decreby affected XX ^C XX XX XX ^C X ^C XX X XX ^C XCY XY X-linked Recessive: (Poor book boys) - Duchenive muscular alrophy. (M/c hereclitary) - Hemophilia A & B. - G-6/D deficiency. - Mcskott- Aldrich syndrome. - Colour blindness. - Cesch-Nyran syndrome. - Chronic granulomalow disease. Duchenne muscular hypertophy of Call muscle begg of fat deposition. - Proximal muscle weakness - Gover's Sign → Not specific. Δ → CPK = 10,000 IU # Valley Sign ⇒ Hypertrophy of Supraspinatus U Atrophy of Infraspinatus Hoo seen in DMH.		X-linked recessive	0
Dear boy affected			0
poor boy affected XXC XY XX XXC XCY XY X-linked Recessive: (Poor book boys) - Duchenne unscular alsophy. (Mc hereditary - Hemophilia A &B. Neuromunculard) - G-6/D deficiency. - Ncxkott- Aldrich syndrome. - Colour blindness. - Lesch-Nyhan syndrome. - Chronic granulomalom disease. Duchenne unscular hypertrophy (DMH): - Pseudo hypertrophy of coeff muscle beog of fat deposition. - Proximal huscle weakness - Gower's Sign → Not Specific. Δ → CPK = 10,000 IU # Valley Sign ⇒ Hypertrophy of Supraspinatus Alsophy of Infraspinatus Alsophy of Infraspinatus Alsophy of Infraspinatus Also seen in DMH. Specific for boys who don't have calk hypertrophy.			O
poor boy affected XXC XY XX XXC XCY XY X-linked Recessive: (Poor book boys) - Duchenne unscular alsophy. (Mc hereditary - Hemophilia A &B. Neuromunculard) - G-6/D deficiency. - Ncxkott- Aldrich syndrome. - Colour blindness. - Lesch-Nyhan syndrome. - Chronic granulomalom disease. Duchenne unscular hypertrophy (DMH): - Pseudo hypertrophy of coeff muscle beog of fat deposition. - Proximal huscle weakness - Gower's Sign → Not Specific. Δ → CPK = 10,000 IU # Valley Sign ⇒ Hypertrophy of Supraspinatus Alsophy of Infraspinatus Alsophy of Infraspinatus Alsophy of Infraspinatus Also seen in DMH. Specific for boys who don't have calk hypertrophy.			0
poor boy affected XXC XY XX XXC XCY XY X-linked Recessive: (Poor book boys) - Duchenne unscular alsophy (M/c hereditary - Hemophilia A&B. Neuronnucalland) - G-6PD deficiency. - Nexkott- Addrich syndrome. - Colour blindness. - Lesch-Nyhan syndrome. - Chronic granulomalous disease. Duchenne unscular hypertrophy of calf muscle beog of fat deposition. - Proximal huscle weakness - Gower's Sign - Not Specific. D - CPK = 10,000 IU # Valley Sign \(\text{Hypertrophy} \) of Supraspinatus Haso seen in DMH. \(\text{Specific for boys who} \) of don't have calf hypertrophy.			0
poor boy affected XXC XY XX XXC XCY XY X-linked Recessive: (Poor book boys) - Duchenne unscular alsophy. (M/c hereditary - Hemophilia A & B. Neuronimanhad) - G-6PD deficiency. - Wiskoff - Addrich syndrame. - Colour blindness. - Lesch - Nyhan syndrame. - Chronic granulomalow disease. Duchenne unscular hypertrophy of Calf muscle beog of fat deposition. - Proximal huscle weakness - Gower's Sign → Not Specific. Δ → CPK = 10,000 IU # Valley Sign ⇒ Hypertrophy of Supraspinatus Hoso seen in DMH. Lypectrophy.			
XXC XY XX XXC XCY XY X-linked Recessive: (Poor book boys) - Duchenne unuscular alrophy. (M/c herectitary - Hemophilia A & B. Neuromuncathora) - G-6PD deficiency. - Wiskott- Aldrich syndrome. - Colour Blindness. - Lesch-Nyhan syndrome. - Chronic granulomolous disease. Duchenne unuscular hypertrophy (DMH): - Pseudo hypertrophy of orly unuscle bcoz of fat deposition. - Proximal hunsele weakness - Gower's Sign - Not Specific. \[\Delta \to CPK = 10,0001U \] # Valley Sign \Rightarrophy of Supraspinatus Also seen in DMH. Specific for boys who don't have cast hypertrophy.			_0_
XXC XY XX XXC XCY XY X-linked Recessive: (Poor book boys) - Duchenne unuscular alrophy. (M/c herectitary - Hemophilia A & B. Neuromuncathora) - G-6PD deficiency. - Wiskott- Aldrich syndrome. - Colour Blindness. - Lesch-Nyhan syndrome. - Chronic granulomolous disease. Duchenne unuscular hypertrophy (DMH): - Pseudo hypertrophy of orly unuscle bcoz of fat deposition. - Proximal hunsele weakness - Gower's Sign - Not Specific. \[\Delta \to CPK = 10,0001U \] # Valley Sign \Rightarrophy of Supraspinatus Also seen in DMH. Specific for boys who don't have cast hypertrophy.		poor boy affected	<u> </u>
XX XXC XCY XY X-linked Recessive: (PO-OT based boys) - Duchenne muscular alrophy. (M/c hereditary - Hemophilia A & B. Newromuscothras) - G-6PD defeciency. - Wiskott - Aldrich syndrome. - Colour blindness. - Lesch - Nyhan syndrome. - Chronic granulomolotis disease. Duchenne muscular hypertrophy of Colf muscle bcoz of fat deposition. - Proximal muscle weakness - Gower's Sign - Not Specific. \[\Delta \to CPK = 10,0001U \] # Valley Sign \Rightarrophy of Supraspinatus Also seen in DMH. Ly specific for boys who don't have call hypertrophy.		J 0 00	
X-linked Recessive: (Poor book boys) - Duchenne muscular alrophy. (M/c hereditary - Hemophilia A & B. - G-6PD deficiency: - Wiskott- Aldrich syndrome. - Colour blindness: - Lesch-Nyhan syndrome: - Chronic granulomalom disease. Duchenne muscular hypertrophy (DMH): - Pseudo hypertrophy of Calf muscle beoz of fat deposition. - Proximal muscle weakness - Gower's Lign - Not specific. \[\Delta \to CPK = 10,000 \text{ IU} \] # Valley Sign \(\Rightarrow \text{ Hypertrophy of Supraspinatus} \) Also seen in DMH. \(\Lip \text{ specific for boys who} \) don't have calf hypertrophy.		XX ^c XY	-6
- Duchenne ruuscular alvophy. (M/c herectitary - Hemophilia A & B. - G-6PD deficiency. - Wickott - Aldrich syndrome. - Colour blindness. - Lesch - Nyhan syndrome. - Chronic granulomalom disease. - Chronic granulomalom disease. - Pseudo hypertrophy of Calf muscle - Seedo hypertrophy of Calf muscle - Bcoz of fat deposition. - Proximal huscle weakness - Gower's Sign → Not Specific. Δ → CPK = 10,000 IU # Valley Sign ⇒ Hypertrophy of Supraspinatus - Also seen in DMH. Ly Specific for boys who don't have Calf hypertrophy.		$xx xx^c x^c y xy$	-
- Duchenne runscular altophy. (M/c herectitary - Hemophilia A & B. - G-6PD deficiency. - Wickott - Aldrich syndrome. - Colour blindness. - Lesch - Nyhan syndrome. - Chronic granulomolom disease. - Chronic granulomolom disease. - Pseudo hypertrophy of Calf muscle - bcoz of fat deposition. - Proximal huscle weakness - Gower's Sign → Not Specific. Δ → CPK = 10,000 IU # Valley Sign ⇒ Hypertrophy of Supraspinatus - Also seen in DMH. L. Specific for Soys who don't have Calf hypertrophy.			
- G-6PD deficiency: - Wiskott - Aldrich syndrome. - Colour blindness. - Lesch - Nyhan syndrome. - Chronic granulomalom disease. - Pseudo hypertrophy of Calf muscle - Securo hypertrophy of Calf muscle - Proximal huscle weakness - Gower's Sign → Not Specific. - Alloy Sign ⇒ Hypertrophy of Supraspinatus - Altophy of Infraspinatus - Altophy of Infraspinatus - Altophy of Infraspinatus - Altophy of Supraspinatus - Altophy of Supraspinatus - Altophy of Supraspinatus - Altophy of Supraspinatus		X-linked Recessive: (Poor book boys)	_
- G-6PD deficiency. - Wiskott - Aldrich syndrome. - Colour blindness. - Lesch - Nyhan syndrome. - Chronic granulomalom disease. - Chronic granulomalom disease. - Chronic granulomalom disease. - Chronic granulomalom disease. - Pseudo hypertrophy of Calk muscle - Securo hypertrophy of Calk muscle - Gower's Sign → Not Specific. - Proximal huscle weakness - Gower's Sign → Not Specific. - Alloy Sign ⇒ Hypertrophy of Supraspinatus - Altophy of Infraspinatus - Altophy of Infraspinatus - Altophy of Infraspinatus - Altophy of Supraspinatus - Altophy of Supraspinatus - Altophy of Supraspinatus		- Duchenne muscular alrophy. (M/c hereditary	4)0
- Colour blindness. - Lesch - Nyhan syndrome. - Chronic granulomalom disease. - Chronic granulomalom disease. - Chronic granulomalom disease. - Chronic granulomalom disease. - Pseudo hypertrophy of Calf muscle - Seedo hypertrophy of Calf muscle - Cover's Lign → Not Specific. - Gower's Lign → Not Specific. - Gower's Lign → Not Specific. - CPK = 10,000 IU # Valley Sign ⇒ Hypertrophy of Supraspiratus - Also seen in DMH. Ly specific for Leys who - don't have calf hypertrophy.		1/00000/	
- Colour blindness. - Lesch - Nyhan syndrome. - Chronic granulomalom disease. - Chronic granulomalom disease. - Chronic granulomalom disease. - Chronic granulomalom disease. - Pseudo hypertrophy of Calf muscle - Seedo hypertrophy of Calf muscle - Cover's Lign → Not Specific. - Gower's Lign → Not Specific. - Gower's Lign → Not Specific. - CPK = 10,000 IU # Valley Sign ⇒ Hypertrophy of Supraspiratus - Also seen in DMH. Ly specific for Leys who - don't have calf hypertrophy.		- G-6PD deficiency.	-
- Lesch-Nyhan syndrome. - Chronic granulomalom disease. Duchenne muscular hypertrophy (DMH): - Pseudo hypertrophy of Calf muscle beoz of fat deposition. - Proximal muscle weakness - Gower's Sign → Not Specific. △ → CPK = 10,000 IU # Valley Sign ⇒ Hypertrophy of Supraspinatus Also seen in DMH. Ly specific for boys who don't have calf hypertrophy.		- Wiskott- Hedrich syndrome.	•
- Chronic granulomalous disease. Duchenne muscular hypertrophy (DMH): - Pseudo hypertrophy of Calf muscle bcoz of fat deposition. - Proximal huscle weakness - Gower's Sign → Not Specific. △ → CPK = 10,0001U # Valley Sign ⇒ Hypertrophy of Supraspinatus Also seen in DMH. Specific for boys who don't have Calf hypertrophy.			
Duchenne muscular hypertrophy (DMH): — Pseudo hypertrophy of Calf muscle beoz of fat deposition. — Proximal muscle weakness — Gower's Sign → Not Specific. Δ → CPK = 10,000 IU # Valley Sign ⇒ Hypertrophy of Supraspinatus ↓ Also seen in DMH.		- Cesch-Nyhan syndrome.	
- Pseudo hypertrophy of Calf muscle beoz of fat deposition. - Proximal muscle weakness - Gower's Sign → Not specific. Δ → CPK = 10,000 IU # Valley Sign ⇒ Hypertrophy of Supraspinatus Also seen in DMH. Ly specific for boys who don't have calf hypertrophy.		- Chronic granulomalom disease.	•
- Pseudo hypertrophy of Calf muscle beoz of fat deposition. - Proximal muscle weakness - Gower's Sign → Not specific. Δ → CPK = 10,000 IU # Valley Sign ⇒ Hypertrophy of Supraspinatus Also seen in DMH. Ly specific for boys who don't have calf hypertrophy.		Duckanna marka lanka (5he (DAM))	
beog of fat deposition. - Proximal muscle weakness - Gower's Sign -> Not specific. \[\Delta \rightarrow CPK = 10,000 IU \] # Valley Sign => Hypertrophy of Supraspinatus Also seen in DMH. \(\Lambda \) specific for boys who don't have call hypertrophy.	- -		
- Proximal hussele weakness - Gower's Sign → Not Specific. Δ → CPK = 10,000 IU # Valley Sign ⇒ Hypertrophy of Supraspinatus Also seen in DMH. Ly Specific for boys who don't have call hypertrophy.	-		_0
- Gower's Sign → Not specific. Δ → CPK = 10,000 IU # Valley Sign ⇒ Hypertrophy of Supraspinatus Also seen in DMH. \ Specific for Boys who don't have call hypertrophy.			-
# Valley Sign => Hypertrophy of Supraspinatus # Valley Sign => Hypertrophy of Supraspinatus Also seen in DMH. Ly specific for boys who don't have call hypertrophy.		_	—
# Valley Sign > Hypertrophy of Supraspinatus Also seen in DMH. Ly specific for boys who don't have call hypertrophy.			0
Also seen in DMH. Ly specific for boys who don't have call hyperfrophy.		,	0
Also seen in DMH. Ly specific for boys who don't have call hyperfrophy.		# Valley Sign => Hypertrophy of Supraspinatus	0
don't have calf hyperfrophy.	6	Altophy of Intraspinatus	6
don't have calf hyperfrophy.		Also seen in DMH. Ly specific for boys who	0
		don't have calf hypertrophy.	0

I 'o	67
	Data/
	Human Genome:
	- 30 000 same.
0	tours to some - Dunlathan
	- 30,000 gene. Largest gene - Dystrophin Skeletal muscle
	Great - Cardinumpakou.
	→ Heart - Cardiouyopathy. → Brain → 1/3 cases MR.
	# Boys - Duchenne - die teens due to
	recurrent Chest infection-
	Duchenne -> XLR, 1/3 denovo mujation.
	Becker's dystrophy:
	- Si milas to duchenne
	- Mild form & present late.
	- Mild form & present late. - X- linked recessive
	Wizkott-Aldrich:
10	-X-linked recessive
	- Eczema
	- Ihrambocytopenia - Immuno deficiency.
	- Immuno deficiency.
	Chronic granulomatous de-
Lo	- X-linked recessive
<u></u>	- Immundeficiency.
1-0-	- Hamo NADPH oxidase deficiency
10	- D _N → NBT dye fest
10	
10	Lesch - Nyhan Syndrome: - X-linked Engadam recessive
10	- Purine defect
0	- HGPRT are deficiency.
10	- Hyperurecemia > 6:5 mg/dl
0	- Seef-mutilation -> nose, palaté, fingers.
	The state of the s

	. 68	
	Page	•
Ø .	A mentally challanged child & dysphagia & ophistho-	0
	tonic spasus. He is also having choicoathetoid	•
	movements & self unitilation behaviour & the	Q
	tamily history. Which of the following	
	unvestigation is suggested?	0_
	A) Serum wric acid> Leesh Nyhan Syndrome.	<u>a</u> _
	B) S. ALP	_
	C) S. LDH	O -
	B) lead level in blood	6
R	A qual- al Vol - James i C de - interest	0-
- 3	A male child à fancani Syndrome à nephrocalcinosis	0
	A) Huber calcinnia - 3/1/2 unio (22+ > 12malla	0
	A) Hyper Calciuria → 24hr urine Ca2+ > 4mg/kg, B) Profein urea → LMW (Bz unero globenura)	•
	Si uitar presentaleon in falher	0
	D) Rickets Urolithiasis	•
	Nephrocalcinoses	•
		•
	Fanconi Syndrome - Proximal tubular defect	0
		•
	Nat HCO3 PO4 AA, Glucose	0_
	60% >85% >88% 100%	٥
		0
	# (Lowe Syndrome) - X-linked recessive. La Occulo-cerebro renal gene (OCRL gene).	•
	Gocalo-cerebro renal gene (OCRI gene).	O
	V Z	0
	Congenital cataract Microcephaly Janconi's " glaucoma MR Syndrosse.	
		•
	# Fructose - 1 - phosphate 7 proximal fubular toxic.	6
	# Fructose-1-phosphate] proximal tubular toxic. Glueose-1-phosphale]	•
	, , , , , , , , , , , , , , , , , , , ,	Ö
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	0	Date
	•	Page
d	0	Fanconi's Syndrome:
e	•	Fanconi's Syndrome: - Genelic
e	0	4 X-linked recessive - lowe
	0	XLR Dent
d		AR
d		4) Cyplinosis.
d	-0-	- Metabolic - Galacloseviea, HF-1 Tyrosinemia (R-Nifesinone). - Acquired - expired tetracycline
		Tyrosinemia (R-Nifésinone).
	-0	- Acquired - expired tetracycline
Q	6	
	0	
G	0	
	0	
	0	
	•	545555
	0	
	0	X-linked dominant talker to
	0	X-linked dominant father to all daughters - more some
	9	
	0	X-linked dominant: Males are more severy affected
	0	- Jamilial hypophosphatemic rickets.
0		- Urea cycle défect due to OTC déficiency.
0	0	- Incontinentia pigmenti 7 Ouly seen in girls.
(V)	0	NEH =
	0	beoz boys die. (lethal in male felius).
0	0	(lethal en male felies).
	0	
	0	
	0	
(6)		

70	
Date	0
	•
Rett's Syndrome: - Permanie berry devolution and disorders.	0
- Pervasive person developmental disorders.	
Autisin (Common en boy (3yn)	
Asperger Rett's	0
	a
Q. Not seen in autistie cha disorder-	
A) Social avoidance	
BY Visual impairment.	_
C) Interest in one self	•
C) Interest in one self D) Interest in one self D) Interest in one self	
· · · · · · · · · · · · · · · · · · ·	•
Asperger's Syndrame: Common en Goya Very good IQ.	•
Very good IS.	•
•	0
Rett's Syndrowe - Common en girls X-linked dominant.	0
X-linked dominant.	0
Normal till 6-18 months	•
Decrease in head growth.	•
Micro Cephaly; MR	0
Hand movements	0
Repetative behaviour	
Me CP2 gene unitation	0
- Macrocephaly not seen.	
> Abnormal dendritec cumphology in	
Cortical pyraundal celle	
Cortical pyramidal celle (postmortem brain biopsy).	
Seizures.	
Cause of death -> Arrhythmias (cardiac)	
Sudden death.	4
Juggen alath	1

1		
	0	
	6	71 Data
		Ornilhine transcarbamoylase deficiency: # Oralic aciduria -> URACIL -> X - linked disorder.
	0	# Oralic aciduria -> URACIL
	•	→X-linked disorder.
		- The mother of these child have also high Uracil level in urine.
		level in urine.
	0	
	0	Delelions:
	0	
		Major delelión → Cri-du-chat → Williams (7923-) Syndrome → Deletion of 5p chr. → Prader-willi Syndrome - Cry like cat due lo aso (15911-13-)
		→ Cri-du-chat → Williams (7923-) Syndrome
	0	→ Deletion of 5p chr. → Prager-willi Syndrome
0	0	- Cry like cat due to aso (15911-13-)
	. 0	→ Deletion of 5p Chr. → Prader-willi Syndrowe - Cry like cat due lo as@ (15911-13-) laryun: → Di-george's Syndrowe (22911-)
	0	
	0	$\Delta \rightarrow 5y FISH.$
	0	141511.5. 1 0 1
	0	William's Syndrome:
	0	- haribbasal bulus Heupsia
	0	Supravalvular aarlië stenosis ē peripheral pulm stenosis — Hypercalcemia — Elf in tacies
	0	- Elt in tacies.
	0	Di-George's Syndrome:
The state of the s		Di-George's Syndrome: - Hypoplasia of 3rd & 4th parapharyngeal pouch. - Absent (Thymus Parathyroid.
		- Absent / Thynnes
		Parathyroid.
	6	
-	0	
10		

72	0
Date	•
January Dan Tion:	0
JRANSLOCATION:	0
	0
$//3 + //3 \longrightarrow //3/$	0
A D D D	٥
1 () 8 Cost	_0
- Unbalance	_0
- Robertsonian Translocation:	•
Translocation of w two Acrocentric	-6
Chromosome.	6
	(<u>0</u>)
# M/c/c (Genelië) of MR = Trisoury 21 (Down's Syndron	ne)
	0
Extra chromosome is of females.	0
Irisoury 21 - In 95% cases: Maternal meiotic non-dysjunction	0
- 3-4% - Robertsonian translocation	0
- 1-240 Masaic 47/46	•
carrier of R7 look normal	0
but they can have abor Children.	0
d .	_6
MOSAICISM:	_
A single zygote giving rise to different cells.	8
	- ©
# CHIMERA - different zygote giving rise to different cer	els 0
Kare in humans.	•
- Mosaicisur Seen in humans	0
- 1-2% are do work	0
# KWnefeller Syndrome -> 80% xxy; xy/xxy;	É
×Y/×XXY.	0
	•
	-

	9		n
	0		
	0		73
C	0		Datz
C.	0		Jurner's Syndrome:
	0		Jurner's Syndrome: Cytogenelics
	0		60% 45X0
0	0		15% Mosaic XX/X0
	6		10% Goochromosome Xq or Xp Mentally Reparded.
	0		5% Mosaic XO/XY -> Risk of Gonadoblastoma.
	-0-		
	0		# loss of one aren & duplication of other
C	0		V / 0
Q	0		Isochromosome.
d	0		
	•		Mosaicisur & Somalie - Not transmitted Germline - Transmitted
C	0		Geruline - Transmitted
			Blood DNA is normal.
C	0		eg: Germaline Osteogenic imperfecta.
6	0	N	Couple has livo children & tuberous sclerosis. On defailed
0	0	3	clinical & las evaluation (including molecular studies)
	0		
Q.			explains the 2 affected children in this family—
	0		A>
			\(\mathcal{B}\)
0			C.>
	<u> </u>		De Germline mosaisie cion.
	9	#	Maternal inheritance -> Mitochondrial.
	0		Mitochondreal inheritence:
			· MERRF (Myoclonic épilepsy & red ragged fibres.
	•		· Mitochoudrial encephalopathy, étroke-like episodes,
	0		4 lactic acidosis (MELAS)
I	•		· Leber hereditary oplic neuropathy (LHON)
H		- 11	, ,

12			-
	74	٥	
	Date	•	6
	· Leigh disease		
	· Kearne - Sayre Syndrome (KSS) (ophthalmoplegis)	0	6
	· NARP (Neuropatay, Ataxia, Retinitis pigmentosa).	@	
	· Chronic progressive ophthalmoplegea.	٥	6
	· Pear con's Sun drame: Paner topenia	0	6
	+ Paucreatic insufficiency	8	6
		_	6
#	Anticipalion: Severely of genelic disorder 1 c	—	
	every successive generalion.	•	9
	More repeat - more problem.	6	- 6
	eg: All Irinucleotide repeat disorders	0	- 5
	· Fragile X - CGG repeats	6	5
	· 7. Afanca - GAA 199	6	0
	Myotonic dystrophy - CTG, CCTG	6	- 6
	· Spinobulbar muscular elyetrophy - CAG	_	-
	"Spins cerebellar ataxia - CAG/CTG.	0	
.	Space Colored Ly 4 most -1 // C/ 9.	•	- 💍
	Fragile X: agreet	•	. 🔿
	Fragile X: genelië - And w/c cause of MR in boys.	0	
	- Canel	<u> </u>	٥
	- large face	•	<i>•</i>
	- Large face - Large ears - Prominent gaw - Large testion - CGG repeats > 1500 repeats		. (2)
	- Prominent gaw		
	- Large testis		- 🔾
	- CGG repeats > 1500 repeats	-	- 0
		- 0-	- 🕘
		<u> </u>	- 🥏
			- Q
		<u> </u>	- 0
		6	_
11		_	

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1		
	•	75
		Date/
	•	Genomic imprinting:
	0	Chr. 159 + 11-13 deletion.
	0	Chr. 15 g = 11-13 deletion. La Paternal inheritance cause Paderwilli Syndrox
	0	4 Majeraal " Aorglemann"
	0	
	0	- Differential expression of genelic appearance
		- Differential expression of genelic appearance dopending upon parents.
1		Prader-wille Syndrouse
		- Severe reconatal hypotoma.
1	•	Obesity
T	0	- Small hands & feets. (R-GH treatment) - Unusual behaviour
I	0	- Unusual behaviour
	•	- MR.
I	0	- High Ghrelin → So obese (&-Anti Ghrelin)
	0	Anglemann Syndrome: apetite hormone
	•	- Dat birth for fundus.
Good	•	- K/A hoppy puppets. - Subsequently develop Seizures
	•	- Subsequently develop seizures
	0	- MR .
Z	0	- Afaxia
	-0	# Genomic imprinting - OPrader Willi Syndrome (70%)
	-0	
3	0	Almond Shaped eyes.
2	0	2) Angelman Syndrome (70%)
	0	(3) Neduatal DNI
	0	(3) Beckwith Werdman (S) Seckle
	0	
	0	(b) Temple D Wang
	0	
		8) Pseudohypoparathyroid [b.

	76	٥	-
	Date Pege	•	- 4
Q	Father carrier of cystic febrosis - AAC	0	- 6
	Halher carrier of cyslic febrosis - AAC Mother - N →AA	•	- 6
	✓	0	- d
	Yes there is a chance of cystic fibrosis in child	a	- 6
	ACAC U U	Ô	- 6
	↓	_	
	Uniparentral bisoury.	O	- (4
		•	- 4
	- In some cystic fibrosis - In some s é ckie cells	<u> </u>	- 6
	- La Soure sechle cells.		- 6
	· 2Ath Dooden William III and Wing	Ö	- 6
	· 30% Prader Willi - Unimalernal disony.	6	- 6
	5% Aigle mann - Uniparental disony.	6	- (
	PRADER WILLI:	•	- (
		0	-
	70% - Palernal inheritance deletion. 30% - Unimalernal disony	•	-
	← Maternal silencing gene.	٥	(
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		Date
	0	Page
	0	Congenifal Heart ds:
6	0	
6	0	NADA'S CRITERIA:
6	0	NADA'S CRITERIA: / Major & livo minor criteria at least. Major: ① Systolie murmur grade III or more ass. c thrill- ② Diastolic murmur
	0	Major:
	0	O Systolie um nur grade III or more ass. Ethrill-
		2) Diastolic muruur
		3 Cyanosis (Central) 4) CHF
		4 CHF
	<u> </u>	Minor:
		1) Systolic runrum < grade 111
		2 A50 S2
	•	3) A6D ECG
		(4) A6(3) X-Ray
9	0	\$ (5) A6(1) BP
	•	
	•	
	0	# Az Pz Expire
	0	# A2 P2 Expire A2 P2 Inspire
	0	/
	0	[ASD]- Wide & fixed S2.
	0	A_2 P_2 Expire A_2 P_2 Inspire.
		A2 P2 Inspire.
C		
C.		- Volume overload en right ventricle.
		<u> </u>
T.		VSD - Wide & Variable Sz.
		A2 P2
	Ð	Az Pz
	•	
1	0	
	0	

- 1		
	. Pate 1	78
	Page	
	TOF - Single S2 (A2).	0
	()	•
#	All newborn has RVH & RAD.	0
	- Axis like adult >1st month life.	<u> </u>
-	- T-wave V, ; V3R; V4R	<u> </u>
	· up first 48 hrs.	
	+2 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1	
	$\begin{array}{c c} +2 & -1 & -1 \\ +3 & +1 & +1 \\ +3 & +1 & +1 \\ +3 & +1 & +1 \\ +4 & +1 & +1$	-
		6
	1+5	-
-	-Vh-	
	- QRS gais	
	· ·	
	lead avF - 30° to +110° 90°	
	· Negative after 42hm	•
	 Negalwe after 48 hrs Never be +ve < 6yrs > 6yrs → positive 	
	• \ 6 use \rightarrow hositive:	6
	- Byrs pasame	0
	Prevalance of CHD:	•
	Prevalance of CHD: - Prevalence = 0.8-1%	
	Recurrance = 2-6%	0
	M/c CHD = VSD (30-35%).	
	2nd M/c CHD = ASD (Secundum) -6-8%	•
	> PDA (6-8%)	
	> Co-arctation of Aorta (5-7	%)
	> TOF (5-7%)	•
	> Pulm. Valve Stenosis (5-7%	(₂)
	> Aortic , (4-74)	(a)
		0

	u
	79
9	Date
0	M/c Syndrouse in CHD = Down's Syndrouse.
0	The state of the s
0	Down Syndrame:
0	M/C -> Complete AV septal defect (CAVSD)/ AV canal defect / Endocardial Cushion defect
0	AV canal deject / Endocardial Cushion defect
0	Ostium primum ASD.
-0-	(37%) - M/c/c of death.
-	- VSD (3/%)
-	- ASD (15%) → Secundum
	- Partial AV septal defect (PAVSD) - 6%
0	- TOF → 5%
10	$-PDA \rightarrow 4\%$
	- Miscellaneous → 2%
	Turners's least to the stand time bod costie walne
	Jurner's → half to One third bicusped abortic value;
	Noonan's -> Purver's phenotype
	AD; $XX = XY$
0	Valvular pulm. Stenssis.
0	HOCM; ASD.
	Rubella → PDA; Peripheral pulm stenosis; VSD.
0	
	Rubella
	Alagille Syndrome William's
-	Williams .
0	
0	Malernal lilhium -> Ebstein's anomaly.
0	Matanal muchs - Endage dial tibroplatacis!
0	Maternal numbs -> Endocardial fibroclastosis/ LV obstruction newborn. Maternal penicillamine -> Cutis Laxa.
0	Malonnal penicillamine - Cutis Laxa.
0	11,0400000

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. Pour 1 1	
Date!	0
Malernal SLE << Malernal Singrey Sundrouse	0
Malernal SLE << Malernal Sjogren Syndrome - New born complete heart block pacemaker insertion (anti other). Ro).	•
pacemaker inserlien (auti 1960). Ro).	0
	•
Malernal warfarin:	
Chondrodysplasia punctata.	
Malernal Malidonide: Phocomelia.	
 Foetal circulation:	
1 Umblical Vein (left)	•
2 umblical vein (left)	•
	•
Ductus venosus ->	•
	©
PO2 in umblical vein = 30-35 mm of Hg PO2 of IVC in fetus = 28-30 mm of Hg.	•
 PO2 of IVC in fetus = 28-30 mm of Hg.	•
0 0	0
 # As soon as child takes his 1st & breath	0
 - Umblical arlery constricts.	
\downarrow \downarrow	
 U- vein closes	
√	
 Duclus venosus closes.	
 Duclus arteriosus:	
- Physiological ē in 10-15 hrs Anatonii cal → 10-21 days.	-
 - Anatonical → 10-2/days.	0
 Foramen ovale:	
 Functionally closes by 3 months. Anatomically 10-15-% open.	
 Anatomically 10-15 to open.	

0		
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1		81
1		Date
	•	CHD
	0	
	0	Acynotic Cynolic.
	0	J
	0	Acynolic: L→R Shunt
		ASD, VSD, PDA.
1		Pulm. blood flow 1 (Plelhora)
1		Pulm blood flow 1 (Plelhora) Les lung vascularity is good.
1		
1	•	GF: Failure la Chrive
1		Recurrent premuonia
I	0	Geeding diaphoresis CHF in 6-10 whe of life.
1	0	CHF in 6-10 who of life.
1	9	Suck-rest-suck cycle 1 swealing (d/t sympathiliz stimulation).
1	•	1 swealing (d/t sympathilit stimulation).
1	0	· ·
1	0	Tachycardia j in every CHD. Cardio megaly
1	•	Cardio megaly I
1	•	7
	0	Cyanotic
	0	PBF
	•	1 1
	-0	
9	0	- Persistant Pruncus Digenua Tricuspid Alreoia - LVH
	0	
	0	
	0	
	0	-d TGA + VSD (Box/Ballen heart) 2 DORV + PS
	0	
9	•	7'
	0	physiology. + PS.
	0	J d sound

11	1	
	Date	
	Page	0
	TAPVC (Potally appuratous bully, Vayous courselies)	0
	(upo 50% i francis construction).	0
	TAPVC (Jotally anomalous pulm. venous connection): svc Supra > 50/0; figure of 8 / Snow man/ cottage leaf.	0
		6
	0 7 15	<u> </u>
	Corona	
	INFRA	
	Diaphragin	-
	Portal Vein	0
	More severe TAPVC.	•
1		0
	- Cyanosis at birth Obstructive pulm venous	8
	hyperlenoion.	
	- Ground glass: Kerley Bluies.	0
	= Worsen by PGE1 infusion	0
	- Only pedatric cardiac Sx emergency.	
		0
	Tricuspid Alresia:	0
		0
	- Cyanosis + V PBF	•
	$R \longrightarrow L \longrightarrow L$	
	LVH	_@_
	LAD	-
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		II
	•	Paga
	•	ASD(Atrial Septal defect):
	0	svc
(4)	0	SVC: Sinus Venous
d	9	ASD OF
4	0	
	0	IVC: Sinus Primum ASD
	-0-	Venous ASD.
	0	/
	0	Secundum ASD
1	0	M/c syndrome ass = Down's Syndrome.
		V
I	•	Endocardial Cushion defect.
	0	R L
1	0	
I	0	
H	0	- Very large L-R Shunt. - PBF1
I	•	
I		- Pulm. plethora
I	•	100 C Do
I	0	ASD Syndroure:
	9	· HOLT ORAM: · Familial, AD,
1	•	· ASD Secundum; VSD; Idegree block:
I	0	· AF + Bone defect (Absent Radius).
	0	Distally placed thumb/Rudimentary thumb/
	0	• A/K/A Hard - heart Syndrome.
	0	· TBX5 mutalion -> Pleiotrophy.
	0	4 Common transcriptional factor for
O	0	hand & heart.
40000	0	
	0	

Assent Radius associations: • ECG (40H-oram) • Platelet (7homoscy topenia; AR). • Bane marrow biopsy (7ancomis anemia) • Rarely Karyotyping (Edward Syndrome) ASD Syndromes: - Downis Syndrome - Holt oram - Lutembacher - ASD + Mitral Stenois - Ellis Van Creveld - ASD + palydactyly. ASD Secundum: • Child -> asymptomalic, wide & fixed S2. • ECG -> RAD (Right axis deviation). • In adult life -> Complications • Rv failure • Arrhythmias; AF -> CVA • Reversal; R -> L (Eisen menger Syndrom) Natural history: 3t < 3 mm -> close itally >8 mir -> Unlikely to close; Require Sx. 9 marcation of Sx in ASD Securdum: - All symptomatic - Ap / Sx > 2; even if no symptoms. L> Pulm blood flow / Systemic blood flow.	0 Date	. 💩
· ÈCG (4014-oram) · Platelet (Thrombocy topenia; AR). · Bone marrow biopsy (Faricani anemia) Cangenital aplastic anemia · Rarely Karyotyping (Edward Syndrame) ASD Syndrames: - Downi Syndrame - Holt oram - Lutembacher - ASD + Mitral Stenosis - Ellis Van Creveld -> ASD + polydactyly. ASD Secundum: · Child -> asymptomalic, write & fixed Sz. · ECG -> RAD (Right axis deviation). · In adult life -> Complications · Rv failure · Arrhythmias; AF -> CVA · Reversal; R -> L (Eisen menger Syndram) Natural history: St < 3 mm -> Close itally >8 miro -> Unlikely to close; Require Sx. 9 marcation of Sx in ASD Secundum: - All symptomatic - All symptomatic - Ref of Systemic blood flow.	Page	0
Platelet (Thrombocy fopenia; AR). Bone marrow biopsy (Tancomis anemia) Congenital aplastic anemia Rarely Karyotyping (Edward Syndrome) ASD Syndrome: - Down's Syndrome - Hot oram - Litembacher -> ASD + Mitral Stenosis - Ellis Van Creveld -> ASD + polydactyly. ASD Secundum: Child -> asymptomalic, write & fixed S2. ECG -> RAD (Right axis deviation). In adult life -> Complications RV failure Arrhythmias; AF -> CVA Reversal; R -> L (Eisenmenger Syndrom) Natural history: St (3 mm -> Close italk >8 marro -> Unlikely to close; Require Sx. 9 marcation of Sx in ASD Secundum: - All symptomatic - Apl 9s > 2; even if no symptoms. L> Pulm blood fices / Systemic blood flow	Absent Radius associalions:	0
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· Bane marrow biopsy ('Jancani's anemia) Cangenital aplastic anemia · Rarely Karyotyping (Edward Syndrame) ASD Syndrames: - Downi Syndrame - Holt oram - Lutembacher → ASD + Mitral Stenosis - Ellis Van Creveld → ASD + polydactyly. ASD Secundum: · Child → asymptomalic, wide & fixed Sz. · ECG → RAD (Right axis deviation). · In adult life → Complications · RV failure · Arrhythmias; AF → CVA · Reversal; R→L (Eisen manger Syndram) Natural history: St < 3 mm → Close itally >8 mm → Unlikely to close; Require Sx. 9 marcation of Sx in ASD Secundum: - All symptomatic - Ap Qs > 2; even if no symptoms. - Pulm blood flew/ Systemic blood flew	· Platelet (Thrombocy topenia; AR).	0
Congenital aplastic anemia Rarely Karyotyping (Edward Syndrome) ASD Syndromes: - Downi Syndrome - Holt oram - Lytembacher -> ASD + Mitral Stenosis - Ellis Van Creveld -> ASD + polyanetyly. ASD Secundum: · Child -> asymptomalic, wide & fixed \$2. · ECG -> RAD (Right axis deviation). · In adult life -> Complications · Rv failure · Arrhythmias; AF -> CVA · Reversal; R-> L (Eisen menger Syndrom) Natural history: y < 3 mm -> Unlikely to close; Require Sx. 9 marcation of Sx in ASD Secundum: - All symptomatic - Ap Os > 2; even if no symptoms. -> Pulm blood flow Systemic blood flow		0
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ASD Syndrames: - Down's Syndrame - Holf oram - Lutembacher \rightarrow ASD + Mitral Stenosis - Ellis Van Creveld \rightarrow ASD + polydactyly. ASD Secundum: · Child \rightarrow asymptomalic, wride & fixed \$2. · ECG \rightarrow RAD (Right axis deviation). · In adult life \rightarrow Complications · RV failure · Arrhythmias; AF \rightarrow CVA · Reversal; R \rightarrow L (Eisen menger Syndram) Natural history: If \(23\text{mm} \rightarrow Close il\text{lielf} \) >8\text{mm} \rightarrow Unlikely to close; Require Sx.} Indication of \(S_x \) in ASD Secundum: - All symptomatic - \(Q_p \) \(Q_x \rightarrow 2 \); even if no symptoms. In Pulm blood flew \rightarrow Systemic blood flew.	Congenital aplastic anemia	0
ASD Syndrames: - Down's Syndrame - Holf orain - Lufembacher \rightarrow ASD + Mitral Stenosis - Ellis Van Creveld \rightarrow ASD + polydactyly. ASD Secundum: · Child \rightarrow asymptomalic, wride & fixed S2. · ECG \rightarrow RAD (Right axis deviation). · In adult life \rightarrow Complications · RV failure · Arrhythmias; AF \rightarrow CVA · Reversal; R \rightarrow L (Eisen menger Lyndram) Natural history: yt < 3 mm \rightarrow Unlikely to close; Require Sx. Protection of Sx in ASD Secundum: - All symptomatic - Qp/Qs > 2; even if no symptoms. Lightarrow Pulm blood flow Systemic blood flow.	· Rarely Karyotyping (Edward Syndrome)	
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- Ellis Van Creveld ASD Secundum: Child Asymptomalic, wide & fixed S2. ECG RAD (Right axis deviation). Natural life Complications RV failure Arrhythmias; AF CVA Reversal; R L (Eisen menger Syndrom) Natural history: Af < 3 mm Close ilself >8 months Unlikely to close; Require Sx. And symptomatic All symptomatic Ap/ Qs > 2; even if no symptoms. Pulm blood flow/ Systemic blood flow		•
ASD Secundum: Child -> asymptomalic, wide & fixed S2. ECG -> RAD (Right axis deviation). In adult life -> Complications RV failure Arrhythmias; AF -> CVA Reversal; R-> L (Eisen menger Gyndrod) Natural history: Y (3 mm -> Close elself >8 mm -> Unlikely to close; Require Sx. In all symptomatic - All symptomatic - All symptomatic - Reversal; Rosymptoms. L> Pulm blood flow Systemic blood flow.	- Luteunbacher -> ASD + Mitral Stensis	9
ASD Secundum: Child -> asymptomalic, wide & fixed S2. ECG -> RAD (Right axis deviation). In adult life -> Complications RV failure Arrhythmias; AF -> CVA Reversal; R-> L (Eisen menger Gyndrod) Natural history: Y (3 mm -> Close elself >8 mm -> Unlikely to close; Require Sx. In all symptomatic - All symptomatic - All symptomatic - Reversal; Rosymptoms. L> Pulm blood flow Systemic blood flow.	- Ellis Van Creveld -> ASD+ polydactyly.	•
Child → asymptomalic, wide & fixed S2. • ECG → RAD (Right axis deviation). • In adult life → Complications • RV failure • Arrhythmias; AF → CVA • Reversal; R → L (Eisen menger Syndrom) Natural history: 9t < 3 mm → close itself >8 mm → Unlikely to close; Require Sx. 9mdrcation of Sx in ASD Secundum: - All symptomatic - Qp/Qs > 2; even if no symptoms. • Pulm blood flow / Systemic blood flow.	<i>) </i>	0
ECG → RAD (Right axis deviation). • In adult life → Complications • RV failure • Arrhythmias; AF → CVA • Reversal; R→L (Eisen menger Syndrom) Natural history: 9t < 3 mm → Close ilself >8 mm → Unlikely to close; Require Sx. 9ndroation of Sx in ASD Secundum: - All symptomatic - Op/Os >2; even if no symptoms. L> Pulm blood flow/ Systemic blood flow.	ASD Secundum:	0
Pulm blood flow/ Systemic blood flow	· Child -> asymptomalic, wide & fixed Sz.	0
Pulm blood flow/ Systemic blood flow. • RV failure • Arrhythmias; AF → CVA • Reversal; R → L (Eisen menger Syndrom) • Reversal; R → L (Eisen menger Syndrom) • Reversal; R → L (Eisen menger Syndrom) • Pulm blood flow/ Systemic blood flow	· ECG -> RAD (Right axis deviation).	0
Pulm blood flow/ Systemic blood flow. • RV failure • Arrhythmias; AF → CVA • Reversal; R → L (Eisen menger Syndrom) • Reversal; R → L (Eisen menger Syndrom) • Reversal; R → L (Eisen menger Syndrom) • Pulm blood flow/ Systemic blood flow	· In adult life -> Complications	0
· Arrhythmias; AF CVA · Reversal; R L (Eisen menger Syndrom) Natural history: 9 < 3 mm Close itself >8 mm Unlikely to close; Require Sx. 9 marcation of Sx in ASD Secundum: - All symptomatic - Qp/Qs > 2; even if no symptoms. L> Pulm blood flow/ Systemic blood flow.	7	0
· Arrhythmias; AF CVA · Reversal; R L (Eisen menger Syndrom) Natural history: If <3 mm > close itself >8 mm > Unlikely to close; Require Sx. In ASD Secundum: - All symptomatic - Qp Qs > 2; even if no symptoms. L> Pulm blood flow / Systemic blood flow.	· RV failure	
Natural history: If (3 mm) > close itself >8 mm) > Unlikely to close; Require Sx. Indication of Sx in ASD Secundum: - All symptomatic - Qp/Qs > 2; even if no symptoms. I Pulm blood flow/ Systemic blood flow.	· Arrhythmias; AF -> CVA	
Natural history: If $\angle 3mm \rightarrow close$ itself >8mm $\rightarrow Unlikely to close; Require Sx.$ In ASD Secundum: - All symptomatic - $Qp/Qs>2$; even if no symptoms. Let Pulm blood flow/ Systemic blood flow.	· Reversal; R -> L (Eisen menger &	क्षिया हाता
Indication of S_x in ASD Secundum: - All symptomatic - $Q_p/Q_s > 2$; even if no symptoms. L. Pulm blood flow/ Systemic blood flow.		
Indication of S_x in ASD Secundum: - All symptomatic. - $Q_p/Q_s > 2$; even if no symptoms. - Pulm blood flow/ Systemic blood flow.	Natural history:	
Indication of Sx in ASD Secundum: - All symptomatic. - Qp/Qs >2; even if no symptoms. La Pulm blood flow/ Systemic blood flow.	of <3 mm → close elself	<u> </u>
Indication of Sx in ASD Secundum: - All symptomatic. - Qp/Qs >2; even if no symptoms. La Pulm blood flow/ Systemic blood flow.	>8 mm - Unlikely to close; Require Sx.	
- Au symptoms Op/Os >2; even if no symptoms Op/Os >2; even if no symptoms Op/Os >2 Pulm blood flow/ Systemic blood flow.	V	0
- Au symptoms Op/Os >2; even if no symptoms Op/Os >2; even if no symptoms Op/Os >2 Pulm blood flow/ Systemic blood flow.	Indication of Sx in ASD Secundum:	
- Qp/Qs >2; even if no symptoms. La Pulm blood flow/ Systemic blood flow.	- All symptomatic.	
4) Pulm blood flow/ systemic blood flow.	- ap/as >2; even if no symptoms.	
	- Pulm blood flow/ Systemic blood flo	مین و

1			85
1	0		Date
	0	Ø.	Least chances of Infective endocardiles is seen &?
		1	A) Small VSD -> M/c/c of IE
1			By Small ASD secundum -> Rare
	0		c) Mild AS
1	0		D) Mild AR.
1			# ASD Secundum doesn't require any prophylaxus t/t
1			before going to Sx.
9			
Y		,	ASD primum + Mitral Regugitalian:
1	•		- Wide & tixed S2 +
	0		ASD primum + Mitral Regulgitation: - Wide & fixed S_2 + $S_1 = S_2 = S_2$ apex \rightarrow anilla & back.
9			- 6-10 wks presents & CHF.
	•		- Conduction defects; ECG → LAD.
	•		- Conduction defects; ECG → LAD. - Common in Down's Syndrome baby.
9	•		
	•		LAD d/t endocardial Cushion
	•		LAD d/t endocardial Cushion defect.
			LAD
1			Down's
C	•		AVSD >1
			+ 0°
A PARTY			
-			+ \$ 90°
			₩ ₁
	0		
	•		
	0		

•	86	
	Page	0
	VSD (Ventricular Septal defect):	0
	VSD (Ventricular Septal defect): 70% → Perimembranous	
		0
	Small VSD Medium VSD Large VSD	_0_
	Small VSD Medium VSD Large VSD Root of aorta < 1/3 R L L	0
		_0
	· Called Maladie	
	de Roger's defect. CHF at 6-10 wks of life	-0-
	· Lead marater (Si)	-
	(Pansystolic) . No murmur/	6
	Lower left Sternal Ejection systotic Torurmur.	0
		0
	border. (6/w S1 & S2). • Asymptomatic	6
	- 175gup/ourite	0
		•
	•	•
	# In medium to large VSD / Lett Atrium enlarge text.	
	In Small to medium VSD, left Ventricular hunes trops	•
	# In medium to large VSD, Left Atrium enlarges first. In Small to medium VSD, left Ventricular hypertrophy. due to blood overload.	ð
2		<u> </u>
		0
	LA	_0
	R L'altayed diastolic unurmer	
	Apex	
	Natural course of VSD closure: • 80% perimembranous • 50% muscular VSD's close.	-0
	80% perimembranous	0
	· By 4 yx.	
		<u> </u>

1		
1	•	
1		Bata
d		Indication of Sx in VSD: - Failure of Medical Cherapy. - Digorin - Diurelies - Dilators
0		Indication of Sx in VSD:
d	0	- Failure of Medical Cherapy.
	0	4 Digoxin
d		→ Diurelier
d		4 Dilators
	0	1
	_	- ap/as > 2; if no symptoms.
	-	- Swise Cheese VSD. (Mulleple; Apex)
	-	- Supracristal (outflow)
		1 0
		# large L -> R Shunt
	0	¥ ×
		Pulm. blood flow 1
	0	√
	0	Irreversible changes pulm microvascular.
9	0	[Pu/m. HTN]
	•	√
	()	RV pressure 1; RVH
	•	<u> </u>
		Reversal; R->L (Eisenmenger Syndrome).
	0	1/2
		1 : 012
	-8	Sx is GI
	-#	Dilda tion about in a Tank Strang
	*************************************	Differential clubbing: Toes > fingers
	0	PAN + Pausinal
		PDA + Reversal.
	0	(also differential Cyanosis).
Ç	6 #	Down's Syndrome baby & Endocardial custion detect.
		Down's Syndrome baby & Endocurdeal cushion defect undergoes Eisenmenger Syndrome.
	•	1

			•
	88 Date		•
	Page	0	- 6
	Ductal dependent lesion:	0	- 4
	SIE - Apricea.	0	- 4
	- HLHS => Px-(PGE1)infusion.	0	- 4
	- Critical AS	0	- 4
	R - Preductal coarctation	0	-
	- Interupted aorta	0	- 4
	Shock.	_0_	
		—	- 4
	I) Systemic blood flow dependence.	<u> </u>	- 4
	1) Systemic blood flow dependence. 11) Pulm blood flow dependence.	<u> </u>	- ~
	· I'rlcusped Alresia	0	٠ .
	· Pulm: Alresia	0	-
		<u> </u>	0
	R Central cyanosis.	<u> </u>	
		•	
	Que emergency condr → PEF. vilyan	0	
	Ju emergency condr → PGE, infusion.	0	9
	111> d-79A	0	
	Systemic Pulon.	Ö	2
		0	2
		6	0
	$R_1 - PGE$, infusion	a	9
			1 3
	$d-TGA \rightarrow dependent for unixing.$	_ ()	
	4		
#	Truncus Arteriosus is Ductal independent.	0	1
	H G warm C ' TCA - P-115 a'	0	4
	# Emergency Sx in TGA -> Rashkind's Ballon alrial Septostomy. # Definitive Sx -> Tatene's Arlerial Switch. Best line: \(\bar{c}\) in feist Aweeks of life.) .W
	# Determiting Con Totale's netation City		(A)
	La + line of switch.	0	
	d weeks of lite.		•
11			1 5

I	1		
I			89
			Date
	•	#	M/c Cuanotic Heart ds:
			M/c Cyanotic Heart ds: Overall — TGA
			In Infants - d TGA (<1yrs)
			> 1yr - 70F
		#	Hyperoxia test in cyanolic newborns -
1			Hyperoxia test in cyanolic newborns - · 10L Oz to cyanolic newborn · p0z > 150 min Hg -> excludes heart ds.
			· p02 > 150 man Hg -> excludes heart ds.
1			J
A STATE OF THE PARTY OF THE PAR		#	0 50% d-TGA + VSD -> Mild
4			2) d-TGA + intact septa (complete d-TGA) - Birth.
			3) d-TGA + patent foramen ovale > At birth.
			0<3<2
0	0		
	0		TOF (Telralogy of Fallot):
	•	77	TOF (Telralogy of Fallot): M/c cynotic heart de beyond enfancy.
			(1) Narrowing of the pulm. valve (Infundi bular).
			2 RV hypertrophy.
	C		3 Overriding of aorta over VSD.
			4) VSD - Opening 6/w left & right ventricles.
			(perimembranous).
			# Pink child become a blue 70F.
I			
Ĭ	-		- Cyanosis; clubbing.
			- Polycythemia -> R/F of Renal vein Harombosis (RVT)
			- Hematuria, mass, Anemia.
			- 9 nfant - Cyanotic/tet/hyperpreic spelle → Older Squate
			- Complications:
() H	(6)		O < 2ys = /hrombosis
Ü			u

•	Date
0	Pentalogy = +ASD
	Pentalogy = +ASD Trilogy = Overriding of aorta absent; VSD absent; ASD present.
•	ASD present.
•	T CHF never seen in TOF
	L' Cardionnegaly never sean in POF.
	11 V
-	Cardiotheracic ralio > 0.6 infant > 0.55 in older infant.
	> 0.55 in older infant.
	U .
9	1: a 1
	Boot Shaped heart. "Oper en Sabat"
	"Coer en Sabat
•	c
	Ebstein's anomaly:
•	· Cyanosis + PBF
•	· Malernal lithium
•	R Abrialisation of RV. Pressure = RA Ventricular = ECG
•	Pressure = RA
9	(L Ventricular = ECG
	disconcordence 6/w presoure &
-6	ECG.
0	· Intracardial ECG helpful in △. · Systolic; diastolic murmers.
3	Systolic; diastolic muriners.
•	yuarupe rhypen
6)	Boxf Ballon; Massive heart. SVT; WPW Syndrome.
®	SV/; VVr VV SYNCVIOLE
_	
•	

Q	A neonale present à recurrent abdominal pain;
=	restlessness, irritability & deaphoresis on feeding.
	Cardiac auscultation reveals à non-specific
	unrum. He is believed to be at risk of MI.
	The most likely Dis-
	A) VSD
	B) ASD
	C) TOF
	S) Anomalous origin of the left coronary artery = ALCAPA
	- gwave in Lead 1; and
	- LAD branch absent.
	- Dechemic LV → Autero Caleral MI.
	- Caleral MI en enfant.
	R: Bypass Sx.
·	1-TGA → Corrected TGA.
	Normal Heart.
	Alrio-Ventricular disconcordence.
	- / FRA connected to LV
	CA " RV
	No problem to baby.
	8
	•
11	

-		
		Date
-		Page
	•	KAWASAKI'S DS:
	0	- M/c acquired heart de en Us, japan, & Chandigarh.
K		- Fever > Sdays .
	9	- Development of a limp.
	0	- Erythinalous macular exanthem over body
		- ocular conjunctivités.
	-0	- Dry & cracked lips.
1	-	- Red throat & cervical lymphadenopathy.
	-0	- Grade II/IV vibratory systolie ejection mieruur
		at lower left sternal border.
	Ö	- Predominant Neutrophils & 1 platelet.
4		/ /
6		- M/c medium sized vasculilis.
		- 20-25% causes develop aneurissus en fulure.
	9	Which of the following vasculities not occur unadults?
		As Kawasaki de (85% are (5475)
		B) Susac's Syndrome - Seen in adult females.
8		c) Giant cell arterilis
0		$D \rightarrow H \leq P$
		# Peeling of palm & soles is classically seen
		in 2nd - 3rd who of lite.
		# Rare in & Gefore 3 months of life. DOC: Iv Ig.
		DOC: Ivig.
d		Q .
Ì		D: Fever > 5 days & any 4 of these 5
		O Changes in extremitées (eg: Erythma, edema,
	0	desqualion).
	•	2 B/c conjunctivitis (not ass c exudates)
I	0	3 Polymorphous rash (not vesicular)
Ì	0	3 Cervical lymphadenopathy.
-		4 / /

- 1		
	94	
	Date Page	0
	(5) Changes in lips & Oral cavity (eg. Pharyageal	0
	(5) Changes en lips & Oral Cavity (eg: Pharyageal exethuna: dry/tissured or swallen like.	•
	erythina; dry/fissured or swollen lips, Strawberry tongue).	0
		0
	Non-classical fealure of Kawasaki:	0
	Arthralgia; Arthrilis;	0_
	Thrombocytosis; urethrilis;	
	aseptic meningitis (Irritable)	_
		-
	M/c/c of death in Kawasaki -	
	Overall - Coronary arleng ansuryen	•
	Acule phase - Myocardilis.	0
	, , , , , , , , , , , , , , , , , , , ,	0
	R: 2v Ig 2g/kg in aculé phase reduces risk 4-6%	0
	Aspirin 100 ing/kg/day X 2 weeks.	•
	If Resistant to Ivig: 10-15% cases La Add Steroid (Methyl prednisolone).	
- 1 1	es Add Steroid (Methyl prednisolone).	0
	La Repeat Ivig	
	4 TNF blockers → Infliximab; Eternecept.	0
	4 il-1 inhibitor → ANAKINRA	0
	Recurrance Rate > 1-2% cases.	
		-0-
	Mx of aneurysm:	-
		-
	Small -> 50% resolve over 1-2yr.	0
	Small -> 50% resolve over 1-2yx. Aspirin 3-5mg/kg/day.	0
		0
	Medium to large -> Add Warfarm	
	Medium to large -> Add Warfarin Sx (may be bypass)	0
	y y	0
- 11		

· 🥥	
] 0	95 (A) Data
	Paga
0	HSP (Henoch - Schonlein Purpura):
0	M/c vascuililis (small vessel) Overall.
9 0	M/c leucocyto clastic vascuililis.
0	- Palpable non-thrombocytopenic purpura
0	- 19A, deposition of vessels en dermis
20	
9_0	Pathogenesis: Abberrant Galacterylation
	Pathogenesis: Abberrant Galaclosylation Mesangio-proliferative disorder-
	Swall vessels -> Skin
	Arthrilis
0	Arthralgia
90	GIT – mesentric ischemia
	Kidneys - HSP Nephritis (40-50%).
70	
	84% develop in 4 wks
<u>jo</u>	9/% " " 6wke
<u>jo</u>	97% " " Emoulhs.
	,
ြို့ စ	· Micro scopic hemaluria · Proteinuria
	· Proteinuria
<u> </u>	• 1-2% RPGN (over days fo week). 4 On Biopsy crescent Seen 4 : Crecentric GN
<u>j</u> -o	Gon Biopsy Crescent Seen
<u>ji-o</u>	S: Crecentric GN
10	√
10	proliferation of parietal
10	proliferation of parietal epothelial Cells. R: i.v. Methyl prednisolone.
10	K: L.V. Metayl préchisolone.
ji o	
10	
<u></u>	

	96	0
	Date/	•
	Rheumalie Fever:	0
	Rheumalie Fever: . M/c aequired heart de in India / Developing	0
	country.	0
		•
	· Due to Group A B-hemolytic streptococci strains M-type 1, 3, 5, 6 2/18.	0
	· Most frequent 6/w 5-15yx.	
	· Latert period 3 weeks.	
	· Autoimmune: Molecular minicry	-0-
	V	_
	Affects Myocardium Muscle.	
	Muscle.	0
	14 1215 1 (2015) 1	
	Modified Jones (2015): Era of Echocardiography -> Subclinical AR/MR A/c to Risk area.	0
	Era of Echo cardiography -> Subclinical AR/MR	. 0
	Affe to KISK area.	_
-	1 DW Rick - defined as housing an ARE is sidence	0
	Low Risk — defined as having an ARF incidence (2 per 100000 school-aged children.	_
	(usually 5-14 gre old) per year or an all age prevalance of RHD of \(\leq 1\) per 1000 population per year (Class Ita; level of evidence C).	-
	all age prevalance of RHD of < 1 per 1000	_
	population per year (Class Ita: level of	
_	evidence ().	
	li .	
	Criteria = 2 major or 1 major + 2 minor + Essential criteria.	_
	+ Essential criferia.	-
		_
	Recurrance = 2 major or 1 major + 2 min or	
	$(\mathcal{O}_{\mathcal{K}})$	•
	3 minor	•
		<u> </u>
		<u> </u>
- 11	ı	

	i	
1	0	
	•	. 97
I	0	Date
	0	Major Crileria:
3		Low risk populations:
1		
5		· Cardilie (Clinical & for Subclinical) · Arthrilie (Polyarthrilie only).
3		· Chorea
		· Erythema marginatum · Subcutaneous nodules.
		· Subcutaneous nodules.
1		
1		Moderate to high-risk populations: · Carditis (Clinical &/or Subclinical)
İ		· Carditis (Clinical &/or Subclinical)
	(· Arthritis
I	0	- Mono arthrelis or polyarthrilis - Poly arthralgia (7)
	()	- Polyarliralgia (F)
Î		· Chorea
2	<u> </u>	· Erythma marginatum.
5	•	· Suscretaneous nodules.
1	•	
	•	Minor Criferia:
	•	Low risk populations:
		· Polyarthralgia · Fever (> 38.5°C)
	0	· Fever (>38.5°C)
1	0	· ESR > 60 mm in the first hour &/or CRP>3.0 mg/dl.
T.	0	ingfal.
	0	· Prolonged PR interval, after accounting for age variabelity.
	0	Variability.
		· · · · · · · · · · · · · · · · · · ·
	0	Moderate to Highrisk populations:
	0	· Monoarthralgia ' · Fever > 18.5°C
1	0	
	•	· ESR > 30 mm in first hour or CRP) 3 mgfdl. · Prolonged PR interval Also in MR & MS.
1	0	1 rounged Ix without - Hoso in MX & MI.
-	0	
_	i	I control of the second of the

	98	
	\mathcal{R} :	0
	- Aspirin 100 mg/kg/day x/2 wks.	
	- Preduisolone × 12 wks.	0
		0
	· Severe cardilis or CHF.	0_
	- Crystalline Penicilline & X10 days - IE prophylaxis.	
	- IE prophylaxis.	
	<i>J</i> / V	-0-
		0
	Mitial value -> M/c involved in RF	0
	4 Recurrance Cause Mitral Stenosis.	Õ
	<u> </u>	<u> </u>
	Primary prevention	<u> </u>
		0
	In India 2º prevention	<u> </u>
	→ Penicillin G	0
	Benzalhine (i.m.)	0
	- 600,000 IU for children wt < 6015	0
	1-2 million IV for children wt >600	
		0
	or, Penicillin V (Oral)	
	every 4 wks. Or, Penicillin V (Oral) \$\sim 250 \text{ ug twice aday}\$	0
	<u> </u>	-0-
	or, Sulfadiazine er Sulfisoxazole (oral)	-
-	Us 0.5g once a day for pt. wt \$6016	
	or, Sulfadiazine or Sulfisoxazole (oral) Lo 0.59 once a day for pt. wt >60 lb 1.09 once a day for pt. wt >60 lb.	0
	In ht; allowais to benisiellin & Sulta comb	0
	For pt. allergic to penícillin & Sulfa group.	0
	Microlides are given orally.	0
		0
		0
11	·	

		aa ·
		Date
0	-	(1 25 1 ags
0		CATEGORY DURATION
S		- Rheunalie Fever Cout Carditis Syr or until 2/ yrs of age
0		whichever is larger.
0		
9		- RF & carditis but cout residual 10 yr or until 2/ yrof age,
9		heart de (No valvular de) whichever is longer.
O		100000000000000000000000000000000000000
O		- RF à Carditis & Residual 10 yrs or until 40 yrs of age heart ds (persistent Valvular ds). whichever is longer.
\$- © -		heart de persestent valvalar de). Whichever is larger.
		Sanelines lifeline prophylaxies.
		propagiaxis.
		01 11 12 20 20 20 20 20 20 20 20 20 20 20 20 20
} ₹} ©	2	-Blood pressure = 86/600 mm Hg
0		- 4 yr, unconsiouness.
		- 4R = 180 / min
		$- CFT = 4sec$ $\Delta = 8 \longrightarrow Compensaled Shock.$
		R = 20 ml/kg 0.9% Nacl.
•		SHOCK = BP < 10th countile for and & Sex.
		SHOCK = BP < 10th centile for age & Sex.
<u> </u>		Crélesia for Shack:
		Crileria for Shock: Crileria for Hypotensian by age.
		Satural J. 1970 January of of
		Age Syxtolic BP
		Term neonalés (0 to 28 days) (60 mm 49
		Infants (1-12 month) < 70 mm Hg
		Jerun neonales (0 to 28 days) (60 mm Hg Infants (1-12 month) (70 mm Hg Children (1-10 yrs) <70 + (age in yrs X2)
		Children > 10 yrs < 90 mm Hg.
) - 0		
1	Cou	sensated Re - 20 ml/kg 0.9 % Nacl Shock: Resect who sometime
0	1	Shock: Repeat apto 60 mlf kg
0		Shock: Repeat apto 60 ml/kg Le CVP line (next etep).
0		· low - fluid given.

	100		
	Date	•	
		•	0
	· Normal -> Cold epinephrin — Warm: Nor-epinephrin.	<u> </u>	•
	- Warm: Nor-epinepirin.	_	
	Huper touring BP) 95th partile	_	
	Hypertension BP> 95th Centile - Essential -10%; encreasing		
	- Secondary 47N	_	
	Decountry 7777		-
	- Renal parenchymal - Reflux Nephropathy	8_	•
	WOR	_	-
	→ Renovascular	-0	-
	· Major -> RAS; RVT	0	- 🍣
	Minor > HUS	0	_ 🔵
	Cardiae - post ductal coarctation (Turner)	0	_ 💞
	→ Eudocrinal — · Hyperthyroid	0	_ 🐠
	· Cushing · Pheochromocy foma	0	_
	Pheocuromocytoma.	0	_ 🧆
	· CAH 11 beta / 17 alpha	_	_
	hydroxylase deficiency	_	_ 💿
		-	*
	End organ damage in HTN: - Fundue		9
-		•	
	· Echocardiography concentric LVH.	0	4
	· Auy adolscent BP>130/80	0	.
	In children >10.9 ss → 120/80 → HTN • Urine protein.	<u> </u>	@
	Orace parear		4
	R.: HTN	_0_	Q
	· lite style modeticalion	-0-	>
	Phonuscological Harabu and man i	-0-	•
	Super 29th as i'v	0	6
	R: HTN · Life style modification. · Pharmacological therapy — end organ; Symptoms, Severe > 97th centile. ACE i / ARBs.	0	9
	ACE i C/I it GPR <30 -> Causes huberkalous	0	-
	ACE i C/I if GPR < 30 -> causes hyperkalemia	0	-
	By > Autoclipine (CCB's)	<u> </u>	**
11			1

1

•		
		101 Date!!
9		
		Hyperlensive Emergency: • LVF => S3; Gadop; Basal crepts. • Soizures.
. •		· LVF => S3; Gallop; Basal crepts.
		· Seizures.
0		
0		\mathcal{R} :
		Best: i.v. Nicardipene infusion
		Best: i.v. Nicardipene infusion R: Sodium Nitroprusside i.v./
		Esmolol/ Labetalol i.v.
		Labetalol i.v.
		# Linesolid, Nitroprusside & Amphotericin B
		should be covered.
	<i>Q</i> .	A 12yn old boy & Seizure.
	=	A 12yn old boy \bar{c} seizure. BP = 200/140. Jeworal pulses not palpable. $\Delta = \frac{2}{3}$
		Jemoral pulses not palpable.
		$\Delta z = \frac{1}{2}$
		A> Jakayasu aortoasterilis (R-Prednisolone). B> Grand Mal Seizures. C> Jibro unuscular olyuplasia (FMD) D> Renal parenchymal defect.
		B> Grand Mal Seizures.
		C) Jibro muscular olyuplasia (FMD)
		D) Renal parenchymal defect.
		/ / /
<u>-</u> -		
-0-		
1		
-0		
-		
-		· · · · · · · · · · · · · · · · · · ·
0		
. 0		

102	
Page	•
Tachy arrhy Chinas .	•
- Based on QRS.	•
-0.000 months	0
(VT/VF)	
- Pulseless -Stable	•
- Arrest. R-lignoca R-Defibrillalian 0.5-1 7/kg Amioda	rone ·
Narrow	
- Reculrant SVT	
- HR> 220 infant; >180 older	~
- P-wave absent; inverted	•
Vagal maneuvers	•
Stable CHF; Shock	8
R Adenosine (fastly R Synchronized Cardiover	ion 0
gwen & Saline flush)	0
V 0 1	0
as close to the heart	0
as close to the heart as possible.	0
	0
	•
·	٥
	0
	6
	•
	•

		Respiratory Date: 103 yours
0		ough & cold caused by Rhinowows.
0		region and control of
0		IMNCI (JL
0		Age = 2m-12 minths = RR ~> 50 02 more.
0.		Age 12m-60m = RR ~ 40 01morp.
0		U
8_	•	er fast breathing
0_		or fast breathing
Ø —		R . Classical Alamandal Maria Cala
© —		By: - Give onal Axnoxicillin for 5day.
6 -		ANN ADMONDE GOLADED SIGN - CSONDAR PROMINADIAN
©	or	Any general danger sign > (severe frequencia. Studor In calm third 2 or very severe dz
		กา
©		> Crive, 1st dose of an appropriate A/b.
0		-> Refer to hospital.
<u> </u>		
©	Q,	18 m old child wighing 11.5 kg comes to PHC.
©_ ©		with I Reap. difficulty. O/E (ethangic RR = 46/min.
	4	mo Chest Kohaction= Nex Step.
<u></u>	Mrs (b)	Prescribe onal Antibiotic & Refer to higher Contru
0		Qian (a) month of a
©	a	Signs (<2 months) Next Ctep Convulsions or Serious = Give iv.
0	_	Convulsions on Serious = Give iv. Fast broathing (>60) Padeial => Gentamia'n.
		Source Chart Middle Miles
<u></u>	-	10 Or more skin pustules. Refer to
		Or a higher Clubre,
® —		If axidley temp 375°C
<u> </u>		or above or less than 35.5 c
()-		- 00 Nethangic/ Vyronacion-
	-	dess than @ Cimit.
1		
	1	

	Date:	Ą
- 1	Imblicus red or draining local = Give oral	
-	Pus Pus discharg from: Bact S Par oz < 10 Skin pustules. Dye	
6	car or < 10 Skin pustules. Due	
- (Touses of Pneumowith age wice in India lworld Neonates: Grap B. Stephococcus, S. coli.	
Œ.	Neonates: Girp. B. Stephococcus, S. coli.	
	< 3weeks.	
0	30k - 3m = Respiratory - Syncytial virus (RSV)	
	s. Phemonia, H. Jufluenza.	
<u> </u>	- M - 4ys = RSU, S. Pheumonal, H. Influenza.	
	>545 = M. Pheumonae., S. Pheumonae.	
• H	dit.	
9 H	1- Jufleonza - Vacanation - + in Incidence.	
	No. 1	
- \ \ \ \ \ \ \	Diral puermonia	
	- Prodrome.	
=	- Diffuso, Blz	
	- Not lobar preumonia	
	- Interstitial infilterate	
7	t o man and and	
	t: D Doc for RSV = Ribavarin.	
	D dufleonza = Amontacline, Rimontacline	
	Hing = Influenza A -> Neuro minidasa Inhubitor. Ly Oral Oseltominir.	
	1 Dra Oseriaminy	
ρ_{λ}	A JUNDIED ZONDMOLY,	rafi I
<u> </u>	Mdenius:- Phase 1-3 Dirimals.	-1
		715
	Phase 4- may 27, 2009 (Mexico)	7
	Phase -5 - 29/5/09 OSA.	,
	Hyman - Human transmission in one zone	-
		_
	Phage 6 & June 11, 2009, US & India.	
	1 200 01 03 A VILLA	=

	105 YOUVA
0	Date:
	Human - human transmission intwo zones
	H+ N, Mms
	- SS RNA.
6	- Belonge to orthomyrovisidal.
0	- Sizee = 80-200 MM.
	Types !- A, B. C.
Ø	Sinface. Ag = H (He magglidinin) N (Neuro no no ase)
0	N (Neura núndase)
	As the seassatement occurs in swine fluc
0	= Swine flu
©	DIE Antigenic shift eduft - No voccines made
0	
0	Symptoms = Flue like.
©	Complication of Harif -> in High risk groups.
Q.	ED PHEHMONIA (DIVAL)
6	→ Baterial Superinfection.
%	* ARDS like features.
0	
	(High Risk general - Comorbidity.
©	-> They were associated with some martality
<u></u>	> Pregnany
<u></u>	- Me phrotic dyndrome, Chronic 'Mness, port tramplant
<u></u>	- <1 ys., >65 ys.
<u></u>	Indiciations of excitaming
©	Orive. it to all suspected cases of H, M,
<u></u>	O Give, it to all confined cool.
<u>.</u>	Asic by throat swab & Masophanyngeal.
9	Swab & soud for Real time PCR.
©	3 Give it to all house hold confacts, occupations
(
0	
()	Prophylaric dool = 75 mg DD -> 7-10deg -
6	1 of the little and t

*		
0		Page No.:
O		Staph-Aureus
0		- Mox Mortality (10-30 1.)
0	Ch'	- Dir IIIIed Cavify (Pneumaloule)
0		· also seen in dft
0		D Klebsiella.
0}		2> Keruselle vil poisorting
0		- Preumatocelle can Rupture 1 develop preumothorax
Ø		
0	•	S. Chusus: MICK of empyena in children. Chus in Plemal Carity)
©		Clus in Plemal Carity)
O		T/t = ICDT.
©		Doc for S. Couren - Cloracilliu.
©		Vancomycin for MRSA.
<u> </u>		
	.	Heinflunza = Usually fout of S. sepsis. - Can have authoritis, meningitis.
©		- Can have authinitis, meningitis.
<u></u>	E	Rx = ampicillin e chloromphenical. 20-401. Che resistant.
©		D 12 Che resistant.
©		Rx: (Ceptiarone) DOC.
©		A1 -14-1 0
C)	(4)	Atapical preumonia
C		→ Raw - <4 ys = 25 ys. ?
©		- Symptoms - dry coeigh.
©		- Interstition proumoniq
©		- organism = hycoficerna Chlanya.
Ø		Rx:- praciolider
0-		
<u></u>		
0		

O		
(D)	-	
ر ال	-	
<i>C</i> b		

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	Date / / 109
	faniture, jumps.
	Adaptive - Makes tomes of 7 cubes (6 at 2 huntin
·	Scribbles in crailed pattern initates
	Hy stroke, folds paper ence initatively
	language. > luts 3 word's together (Subject, Verly
	094601
	Social -> Handles spoon well, often tell about
	immediate experiences helps to undress,
•	listens to stories when shown pictures
	30 months
	Motor > Goes up stains alternating feet
	Adaptive -> Makes tower of 9 cubes, makes VH&
	Adaptive -> Makes former of 9 cubes, makes VH& horizontal strokes, but generally will
	not join them to make cross imitates
	circular stocke, forming closed figure
	Language > Refers to self by pronoun T
	Knows full name
	Social -> Helps but things away, pretends in
	blay 1
	, 0
,	36 months.
	Motor -> Rides tricycle, stands momentasilig
	on 1 foot
	Adaptive - Makes tower of 10 cubes, in takes
	Construction of bridge of 3 cubes

	DOM 5 Page No. 110
	Date / /
	copies circle, issistates everys
	Language - Knows age & sex, counts 3 objects
}	Ucorrectly, repeats 3 numbers or a
	sentence of 6 syllables, most of speech
}	intelligible to strangery.
<u> </u>	Social -> Plays simple games (in parallel
	with other children helps in dressing
	(unbuttons clothing & puts on shoes)
	washes hands.
	48 months
	Motor > Hops on I foot, throws bell
	Overhand, wes scissors to cut out
	pictures, climbs well
	Adoptive -> Copies bridges from parottol
-	model imitates construction of gate
	The Last copies comes I come
	draws man with 2-4 parts besides
	CAOLOGO
	head, identifies longer of 2 lines. Language - Counts 4 pennies accurately,
•	tells story
	Social -> Play with several children with
	reginning of social interaction &
	beginning of social interaction & sole-blaying, goes to toilet alone

60 monthy. Motor - Skips Adaptive - Draws A from copy, hames heavier of 2 weights Language - Names 4 colours, repeats sentence of 10 syllables counts 10 permics correctly Social - Drends & undrends asks questions about meaning of words, engages in domestic role playing.
Motor - Skips Adaptive -> Drows A from copy, names heavier of 2 weights Language - Names 4 colours, repeats sentence of 10 syllables counts to pennies correctly Social -> Dresses & undresses, asks questions
Adaptive -> Drows A from copy, names heavier of 2 weights Language - Names 4 colours, repeats sentence of 10 syllables counts to pensies correctly Social -> Dresses & undresses, asks questions
Language - Nomes 4 colours, repeats sentence: of 10 syllables counts 10 pensies correctly Social -> Dresses & undresses, asks questions
Language - Nomes 4 colours, repeats sentence: of 10 syllables counts 10 pennies correctly Social -> Dresses & undresses, asks questions
Correctly Social -> Dresses & undresses, asks questions
Social -> Dresses & undresses asks questions
Social -> Drewes & undrewes asks questions
domestic role playing.
·
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	112	0	
	Date/Page	•	•
	Fever & Stridor Inspiratory Sound in	0	
	upper cirusey,	0	9
	Croup/LTB Epiglottilis	0	
	- 75% parainfluenza In world - S. pyogones.	•	
	-> Prodrome -> Stridor S. pueumoniae	0	
	Barking Caugh. S. aureus	0	
	Subglotting norrowing In India - H. Influenza.	0	
	KIA: Stippel Sign dat X-Ray - Thumb Sign.	0	5
	K/A = Stippel sign dat X-Ray - Thumb sign. On X-ray R - Airway [2 meropany tachustory]	1	5
	Ly Doc = jor mild = dexa = 0.6 mg/kg. Ceftriazone + Sulbactan		•
	mod & Surer (ESBL)	•	6
	> Neubulisation = Racomic epinephine.	•	-
	Is westley croup score criteria to dx 11.	•	5
	BRONCHIOLITIS:	•	?
	- Inflammatory obstruction of Smaller arrivary.	•	(
	M/c organism - PSV (50%)	•	3
	- Respiratory Syncytial Virus.	0	(
	R/F:	0	(
	- Males, Topfed.	٥	(
	0 7 - Prelerius; Chronic lung disease.	•	
	©L - L → R shunti.	0	. 🤇
	- Sucking molhers.	٥	_ 💐
·	,	<u> </u>	_ 🧳
	Airway resistance, R = 74 -> air trapping		- 🧉
1	,,,		- 🦸
	Prodrouse -> Wheeze/ Ronchi.	-	- 🧉
		-0-	- ¿
	X-Ray chest show Hyper inflation.	-	- {
		•	
	R: Antibiotice has no role.		_
	Humidified O2. For 2 High Rick asoub - Nobulised Ribavasin.	0	_
	For 2 High Risk group - Nebulised Ribavarin	0	_

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0		Long	leriu – Persisteul	wheeze inta	ncy
0		Long		wheeze infa	
0			Resolute	aisway dise	2000.
0			1 (00.0000	i airway dise	3.02
0			ASTHMA	-	
Ø 0					
0	1	CL	assification a/c lo	severity.	
_			0	V	
⊘-0 -		Step	Symptoms	Night sympton	x Peak expiratory
0-0-			0 /	0 0 1	flow rate.
© O	Į.	Inter wittent		≤2 limes a	>80% predicted;
© 0			asymptomatic &	month	Variability (20%.
© O			N) PEFR byw attacks		
(6) (9)	- N				4
0		Mild persistent	>1 lime a week	>2 tunes a	>80% predicted;
0		/	but (/ lune a day	>2tuies a moult	Variability 20-30%
(· · · · · · · · · · · · · · · · · · ·	.:	<i>U</i>
0	IШ·	Moderate	Daily use B-agonisk;	>/ lunes a	>60% & <80%
()		persistent.		woult	
(6)		7	daily attacks affect activity		predicted; · Variability > 30%
0		1			
90	IV	Severe	Continuous limited	Frequent. 5	60% predicted;
0		persistent.	frequent activity.		60% predicted; Variability>80%
0_		/	. , , , , , , , , , , , , , , , , , , ,		
30					
0		for enle	ruittent -> 50s	B2-aganist	
00		Mild p	ersistent -> +++	inhaled beclow	nelhasone,
00		/	ir wittent → 50s ersistent → +++. Fluticas	one, Budeson	ude.
30		Moderate	persistent - 777	- Salmeiro C/S	us faunce release
0				Theophylline.	
		Severe pe	isistent, -> Therai li	ew dose, long	ferm, allernate
0		,	day	prednisolone.	
	1		V.	/	

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114 Date	0
2 yrs → Acule severe aslhura	
<u> </u>	
Oxygen; Nebulise Salbulatuol	
Nebulised ipratropium bromide	
V -	•
i.v. hydrocorlisone	
V	
S/c Terbulaline	
God to the state of the state o	0
Terbutaline rinfuseon	0
50% Maca.	0
50% MgSO4 → aminophylline.	0
Joreign body: CxR → Persistent inflation Ball value inflation R → Branchoscopy & remove foreign body.	0
foreign body:	
Rall india	
Ball value enfaction.	
Page to the account of	
g a piendre et andigenation braumain i	
a groots of recognigned partitioned in by	ear 📵
Recurrent pueumonia: 2 episodes of radiographic pueumonia in Ly 3 episodes in any lune frame.	
3 episodes in any lune frame.	0
Persistent pueumonia:	
Persistence of symptoms & radiographic abnormalities for more lham 1 moulti-	
100 100 100 100 100 100 100 100 100 100	
Recurrent pneumonia:	0
Cause -> L -> R shunt	0
GERD det aspiration.	0
Immunodeficiency.	0
	0

0	
	115
	Date
0	<u> </u>
0	1
0	8 +
0	PH LES
0	1 >50% 6H<4
0	4 100- 100- 1
0	2 / / / M
0	
10	gam gam
10	24 hr pH LES
	/
	M/c/c of Recursent pneumonia -in U.S. = Cystic Fibrosis.
0	
	Cyslic Fibrosis - Incidence: 1 in 2500 in UK
	- Incidence: 1 in 2500 in UK
0	Gene - CFTR gene (79 31.2 locus)
(
ф <u>ө</u>	CAMP regulated chloride channel.
Ø 💮	
Ø 🌑	- In CF more Sodium goes lo lumen & lo mucosa
0	than Chloride.
90	- Autosomal Ressessive disorder.
o o	- Respiratory: Pneumonia (>5yrs of life).
0	# M/c organism ass. c cystic fibrosis - Pseudomonas
	aerugenosa.
Ĭ	(Mucoid) Non Mucoid)
	# R: Du haled autibiotics
	· Tobramycin
	· Aztreonam
	· Colisten
	· Ciproflox

	0
. 116	0
Date	•
· Auikacin	•
· Amikacin · Levofloxacin	•
D	0
# Respiratory: Pneumonia (>5yx)	
· (Syrs - S. Aureus; H. influenzae.	0
· 5- 18yrs - S. Aureus; Pseudomanas	0
· > 18yrs - Pseudomonas; s. aureus.	
Acromonas; Achromobacler;	
Burkholderia capacia	
> Specific; Jatal	_
GR Mild - Colrimoxagole	-
5 Severe - Meropenem +	•
Colrenoxazole/Doxycyeline	. • -
	•
- Exocrine Pancreas - Stealorrhoea (<5yx)	0
faul - bulky stools.	0
<i>' ↓ · · · · · · · · · ·</i>	•
R - Stealorrhoea in CF	0
Lipase 1000 IU/kg supplement.	0
	Õ
- Endocrine → 25% DM after 35 yrs.	0
- GIT -> Meconium eleum.	٥
Aldolescents - Distal intestinal obstruction Syndrome	0
# 48hm old baby has not passed meconium.	•
Ix > Lower GI contrast study	_
Déagnostie Therapeutic in meconium ilem	12-
- GIT: Diffuse pain abdomen	
Colonic mucosal thickening.	
Colonic mucosal thickening. Intussusceptions.	0
- Nasal pelyss; Azoospermia	0
, vi 0 ,	0

		117
		Date
		- About Mar: 14 intertile was a common in CE males
		- Absent Vas: 1 % infertile men; common in CF males.
	D	which stands are not obstructed in CE?
	9.	Which glands are not obstructed in CF?
		A) Cervin -> Infertile B) Pancreas -> Insufficiency.
		ey Sweat glands
		Causes "Trafficking Defect"
	#	M/c unifaction en CF = DF 508 mutation (Class 11 mutation)
	-,-	(Seen in 70% caucasions)
		1 (25-30 % Judean)
		M/e lethal genelic disorder in caucasions.
		7
		# CFTR gene has 1800 mutalions.
(
0		How many Nucleotide deleted in CF?
		How many Nucleotide deleted in CF? 3 → TTT = Phenylalanine.
ø 🌕		V
ф о		R : For Inafficking Defect
ф о		V .
<u> </u>		DOC - LUMA CAFTOR (Trafficking corrector drug)
0		DOC 7 + 00 0
90		IVACAFTOR (Potentiator drug).
00		√
_ _		opens CFTR 'Cl' Channel.
Ø-Ø		
O		# Lumacaffor - induce hepatic Cyp 450
0		<u>V</u>
0		S. New Corrector → TEZACAFTOR
		<i>V</i>
		closon't induce Cyp450.
30		
(P)	- 11	

	·	•
	. 118	0
	Date/	٥
0	Which of the following is a calcineurin inhibitor?	0
=	A) Jacrolinus	0
	B) Sirolinus 7 m-tor inhibitor	0
	c) Everoliums	•
	D) Cyclosporine	•
		0
		<u> </u>
_	Diagnoslic Crileria of CF:	_
	Diagnoslic Crileria of CF: D'Sweat Chloride > 60 meg/L on 2 occasions	
_	[Ø<40meg/L]	_
_	OR, @ Iwo known CFTR mutalions.	•
	OR, Best - 3 Diagnostic nasal electrode potential	•
	différence.	•
	UU	•
	Newborn screening for CF	0
_#	1RT test -> Immuno reactive Trypsinogen	0
	Assay test. () () (Sensitive test)	0
_	(Sensitive test)	0
		0
<i>Q.</i>	Male, 10 moult boy, Down Syndrome & Recurrent preumoma	٥
	Jilling defect - In Ba-swallow in middle of esophague.	0
	w widdle of esophague.	٥
	> Abbarrent right subclavian arley	_0
$-\parallel$	vascular ring	-0
	Ducke and the same	-@
	Dysphagia Lusoria.	-0
		-0
		٥
		Û
		Ö
		0
$-\parallel$		_

6			
		115 Data	9 !
		Data/ Page	
0	Approach to a pt. c recurrent/	persislent preum	onia:
0	1	/	
	History, physical exam	in CXR	
	1- Rule out	TB	
	↓		
		<i></i>	
	Difficulty in Infection in other	Associated	No cluss
	feeding chocking parts of body	Malabsorption.	
	during feeds.	Pseudououas	
	Jununoglobalin	in airway	
	GER studies, CD4, CD8	<i>√</i>	
0	Ecophageal PH monitoring, NBT, HIV test.	Sweat clifest	
O	Barium Swallow,	Mufalion Studies	
	Direct laryngoscopy.		
()	(/ 0 /0		
ф ©			
♦	Isofonic fluids:	·	
0	-0.9% Nacl - 154 meg/L No	a & cl·	
	- Ringer lactate = Plasura		
© ©	• 130 meg /L Na		
9	. 109 meg/L Cl		
<u> </u>	· 28 meg! L lactale		
	· 4 meg/L K		
	· 4 meg/L K · 3 meg/L ca		
	D		
	Maintenance feuid:		
	Need &		
	- Insensible water loss	-	
•	11		
00	- Energy - To prevent catabolism.		
9 •			
0			7
0			

n	
	•
120 Date!	٥
(A) Page	•
Jype? - Aelult·5 fo DNS - Children 5 fo Dextrose + N/2 or NS. Pain Pneumonia Pneumonia	0
- Adult. 5% DNS	0
- Children 5/2 Dextrose + N/2 or NS.	0
Pain	•
Preumonia &	•
ADH	
10	0
/ Stress	
Druge	
U Company of the comp	
Amount ?	
A/C to Holiday & Segar <10kg - 100 ml/kg/day.	
(10kg - 100 ml/kg/day.	•
10 kg - 1000 ml/day. (40 ml/hr).	•
$10 \text{ kg} - 1000 \text{ ml/day} \cdot (40 \text{ ml/hr}).$ $11-20 \text{ kg} \rightarrow 1000 \text{ ml/for } 10 \text{ kg}) + 50 \text{ ml/kg addition}$	ral O
$11-20 \text{ kg} \rightarrow 1000 \text{ml (for 10 kg)} + 50 \text{ml/kg addition}$ $\text{kg above 10 kg} \cdot$ $> 20 \text{kg} \rightarrow 1000 \text{ml} + 500 \text{ml} + 20 \text{ ml/kg addition}$ $\text{above 20 kg} \cdot$	•
> 20kg -> 1000ml + 500 ml + 20 ml/kg additi	onal C
above 20kg.	0
	•
Patau's Syndrome (Irisomy 13): - Cleft lip & palate: - Polydaetyly - Hypotelorism (Eye Sepreted wide).	0
- Cleft lip & palate.	
- Polydactyly	0
- Hypotelorisin (Eye sepreted wide).	
	@
- Abartus locks like Cyclops	
> Holoprosencephaly.	
(Single eye)	——(ii
5 Jused frontal lobes + Caleral ventrio	cles.
Single eye) (Single eye) (Si	-
- Kecken buo	

Edward Syndrowe (Trisowy 13) - Rocker bottom feet - Werlapping of fingers - Jud M/C Intschip - Material age - GIT anowally are common - Attenda - Exomptalas - Malobsorption TINB (Iransient Jachypnea of New Born): Wet lunger R/F: - Jerun; Cesarean Section - Macrosowia - Precipitous labour - Mafornal Sedation - Mafornal Sedation - St is a benign, self limiting condr & resolver in 48-72 line FiO2 requirement (0.4 Never require weet (0.4 Never require weet anical ventilation. MSL (Mecanium Stained liquor): - Marker of perinatal hypoxia (Common in Post ten Glottis open - Parasympathetic ++ - Marker of perinatal hypoxia (Common in Post ten - Marker of perinatal hypoxia (Common in Post ten - Marker of perinatal hypoxia ++ -		
Edward Syndrowe (Prisony 18) - Rocker Bettom feet - Overlapping of fingers - And M/C totsolny - Malerinal age - GIT assumbly are Common - Altresia gut - Exompholas - Malabsorphian TINB (Gransient Jachypnea of New Born): Wet lungs R/F: - Jerun; Cesarean Section - Macrosomia - Precipitous labour - Mafernal Sedation - At is a benign, self limiting cond ⁿ & resolves in 48-72 tre - Fills require mechanical ventilation MSL (Mecanium Stained liquor): - Marker of perinatal hypoxia (common in Poet ten Glottis open Parasympathelic ++ wewonium Periofalsis ++ passed Anal sphincfer relax		Date
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- Rocker bottom feet - Overlapping of fingers - Jud M/C Intschuy - Maler hat age - GIT anoually are Common - Heresia gut - Exomphalos - Malabsorption TTNB (Iransient Jachypnea of New Born): Wet lunger R/F: - Jerus; Cesarean Section - Macrosomia - Precipitous labour - Mafernal Sedation CxR - Prominent herizontal fissure - His a benign, self limiting cond conduct in 48-72 line - FiO2 requirement (0.4 Never require inechanical ventilation MSL (Meconium Stained liquor): - Marker of perionatal hypoxia (Common in Post tem Glottis open Parasympathelic ++ meconium Periotalsis ++ passed Anal sphincfer relax	0	Edward Syndrowe (Trisowy 18)
- Questapping of fingers - And M/C Intrology - Alexandry - Maternal age - GIT anomaly are common - Atresia gut - Exomptalos - Malabsorption TINB (Iransient Jachypnea of New Born): Wet lungs R/F: - Jerm; Ceoarean Section - Macrosomia - Precipitous labour - Mafernal Sedation CRR - Prominent horizontal fiscure: - His a benign, self limiting cond cond cond recommendation requirement (0.4 Never require ment (0.4 Never require mechanical ventilation: - Masker of perionatal hypoxia (common in Poet ten - Glottis open Parasympathelic ++ - Glottis open Parasympathelic ++ - Guard Anal sphincter relax	0	
- And M/c Intrology - Maternal age - GIT anomaly are Common - Atresia gut - Exomptolos - Malobaorption TTNB (Iransient Jachypnea of New Born): Wet lungs R/F: - Jerm; Ceoarean Section - Macrosomia - Precipitous labour - Maternal Sedation CRR - Prominent horizontal fissure: - Maternal Sedation CRR - Prominent horizontal fissure: - His a benign, self limiting cond cond cond resolves - Precipitous labour - Maternal Sedation MSL (Meconium Stained liquor): - Marker of periodal hypoxia (Common in Poet for - Marker of periodal hypoxia (Common in Poet for - Marker of periodal hypoxia (Common in Poet for - Marker of periodal hypoxia + + - Marker of periodal sphincter relax - Malosphincter relax	0	• 11
- GIT anoundly are common Alresia gut Exampholos Malabsorption TINB (Bransient Jachypnea of New Born): Wet lungs R/F: - Jerm; Cesoarean Section - Macrosomia - Precipitous labour - Maternal Sedation CxR - Prominent horizontal fissure O - 9t is a benign, self timiting cond c resolves in 48-72 hr. Fio2 requirement (0.4 Never require mechanical ventilation. MSL (Meconium Stained liquor): - Marker of perinatal hypoxia (common in Aset tem Glottis open Parasympathelic ++ meconium Peristalsis ++ pussed Anal sphincter relax		17. (1 . !!) 1) 0
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- Jerus; Cesarean Section - Macrosomia - Precipitous labour - Mafernal Sedation CXR - Prominent horizontal fiscure - 9t is a benign, self limiting cond ⁿ & resolver in 48-72 hr. FiO2 requirement (0.4 Never require mechanical ventilation. MSL (Meconium Stained Liquor): - Marker of perinatal hypoxia (common in Poet ten Glottis open Parasympathelic ++ meconium Periotalsis ++ passed Anal sphincfer relax		- Malassorption.
- Jerus; Cesarean Section - Macrosomia - Precipitous labour - Mafernal Sedation CXR - Prominent horizontal fiscure - 9t is a benign, self timiting cond th & resolver in 48-72 hr - FiO2 requirement (0.4 Never require mechanical ventilation MSL (Meconium Stained Liquor): - Marker of perinatal hypoxia (common in Poet ten Glottis open Parasympathelic ++ meconium Periotalsis ++ passed Anal sphincfer relax		,
- Jerus; Cesarean Section - Macrosomia - Precipitous labour - Mafernal Sedation CxR - Prominent horizontal fissure - His a benign, self limiting cond cond conduction - His a benign, self limiting cond conduction - His a benign, self limiting cond conduction - Hever require mechanical ventilation MSL (Meconium Stained Liquor): - Marker of perinatal hypoxia (Common in Poet from - Marker of perinatal hypoxia (Common in Poet from - Glottis open - Glottis open - Parasympathetic ++ - Meconium - Periotalsis ++ - Parased - Anal sphincfer relax		TTNB (Iransient Sachypnea of New Born): Wet lungs.
- Macrosomia - Precipitous labour - Mafernal Sedation CxR - Prominent horizontal fissure - His a benign, self limiting condn & resolver in 48-72 hrs. Filoz requirement (0.4 Never require mechanical ventilation. MSL (Meconium Stained liquor): - Marker of perioratal hypoxia (common in Poet fem Glottis open Parasympathelic ++ passed Anal sphincfer relax		R/F:
- Macrosomia - Precipitous labour - Mafernal Sedalion CxR - Prominent horizontal fissure - His a benign, self limiting cond c resolver in 48-72 hrs. FiO2 requirement (0.4 Never require mechanical ventilation MSL (Meconium Stained liquor): - Marker of perinatal hypoxia (common in fost tem Glottis open Parasympathelic ++ meconium Peristalsis ++ passed Anal sphincfer relax		
- Precipital abour - Mafernal Sedalian - Maker of perimatal ventilalian - Marker of perimatal hypoxia (common in Post fun - Marker of perimatal hypoxia (common in Post fun - Marker of perimatal hypoxia (common in Post fun - Marker of Parasympathelia ++ - Marke		
CxR - Prominent horizontal fissure CxR - Prominent horizontal fissure - 9t is a benign, self limiting cond ⁿ & resolver in 48-72 hre Fi 02 requirement < 0.4 Never require mechanical vertilation MSL (Meconicum Stained Liquor): - Marker of perinatal hypoxia (common in fost tem Glottis open Parasympathelic ++ meconium Peristalsis ++ passed Anal sphincfer relax	<u> </u>	
- 9t is a benign, self limiting cond of a resolver in 48-72 hre Fi 02 require ment < 0.4 Never require mechanical ventilation. MSL (Meconium Stained Liquor): - Marker of perionatal hypoxia (Common in Poet term Glottis open Parasympathelic ++ meconium Periotalsis ++ passed Anal sphincfer relax		- Maternal Sedalion
- 9t is a benign, self limiting cond of a resolver in 48-72 hre Fi 02 require ment < 0.4 Never require mechanical ventilation. MSL (Meconium Stained Liquor): - Marker of perionatal hypoxia (Common in Poet term Glottis open Parasympathelic ++ meconium Periotalsis ++ passed Anal sphincfer relax		OR - Promised data de Co
- 9t is a benign, Self limiting cond of a resolver in 48-72 hrs. FiO2 requirement < 0.4 Never require mechanical ventilation. MSL (Meconium Stained Liquor): - Marker of perinatal hypoxia (Common in Post tem Glottis open Parasympathelic ++ meconium Periotalsis ++ passed Anal sphincfer relax	Y	CXA - Trumwent merezontal fessure.
in 48-72 hrs. Fi 02 require ment < 0.4 Never require mechanical verticalion. MSL (Meconium Stained Liquor): - Marker of perinatal hypoxia (Common in Post tem Glottis open Parasympathelic ++ meconium Periotalsis ++ passed Anal sphincfer relax		- 9t in a leaving cold film it is an a
Never require mechanical vertilation MSL (Meconium Stained Liquor): - Marker of perinatal hypoxia (Common in Poet term Glottis open Parasympathelic ++ meconium Periotalsis ++ passed Anal sphincfer relax		i 10- 32 11
Never réquire mechanical vertilation. MSL (Meconium Stained léquor): - Marker of perinatal hypoxia (common in Poet term Glottis open Parasympathelic ++ meconium Perintalsis ++ passed Anal sphincfer relax		
MSL (Meconium Stained Liquor): - Marker of perinatal hypoxia (common in Port term Glottis open Parasympathelic ++ meconium Peristalsis ++ passed Anal sphincfer relax	,	Mayor Marine 2000 Anical Mantilalia
MSL (Meconicum Stained Liquor): - Marker of perinatal hypoxia (common in Post term Glottis open Parasympathelic ++ meconium Peristalsis ++ passed Anal sphincfer relax		Trover regular machinese voucidition.
- Marker of perinatal hypoxea (common in Poet term Glottis open Parasympathelic ++ meconium Perintalsis ++ passed. Anal sphincfer relax	- 30	MSL (Meconium Stained Liquor):
Glottis open Parasympathelic ++ meconium Peristalsis ++ passed Anal sphincfer relax	-	
Glottis open Parasympathelic ++ weconium Periotalsis ++ passed Anal sphincfer relax		
meconium Periotalsis ++ passed Anal sphincfer relax		Glottis open Parasumbathelic ++
passed. Anal sphincfer relax		
Anal sphincfer relax		1 POWERS TT
		146000
··	©	

			67
	122		0
	Date	•	•
	Complication of Meconium:	•	
	Complication of Meconium: Physical: Meconium: Ball valve.	0	
		0	•
	Collapse air leaks 20-30%	•	6
		•	0
	Chemical: Irritant.	<u> </u>	© •
	1 1 1 (landamb)		
	Biological cumpairs surfactant function (Surfactant) Good culture media (Gwen Antibiotic)		Q
	Good Culture media (Gwen Amesiona)	-	6
	R: Meconium Stained liquor	0	6
	R: Meconium Staured liquor	٥	6,
	Born	•	6
	Vigrous / Jone.	0	•
	HR>100/min	0	-
	Respreffort.	_	-
		_	- 🕸
ling	or,	_	- 🏈
HR'S Abu	100 or, ppv x 100 % Oz. Transfer to mother	<u> </u>	-
Apu		_	1
		6	
			- <u>(3)</u>
	,		- -
		-	-
		-0-	- ''
		•	- [🥯]
		0	_ - <u> </u>
		•	_
		0	 _ 🍪
		0	-

	Date
0	Page
0	GROWTH
0	1-4 months: Weight gain 30 gm/day 5-8 month: Wt. gain @ 20 gm/day 9-12 month: Wt. gain @ 10 gm/day.
0	5-8 month: wt. gain @ 20gm/day
	9-12 month: wt. gain @ 10 guyday.
	Weight multiplas:
	Weight mulliplas: Wt. x 2 = 5 months
	X4 = 2yrs
	$\chi s = 3yx$
Ø	$\chi 6 = 5y\pi$
Ó .	X7 = 7ux
O	X/0 = 10 urs
Ø •	
0	Leaglh:
(•	Leaglh: At birth - 50cm 7 Growth Velocity → +25 (first year)
0	1 yr - 75 cm
O	2yr - 90 cm → +15 → Second year.
() ()	4 2yr - 100cm
(a	Add 6cm / year till buberly.
	1 Somatic
	length.
•	
	<u> </u>
	Age
g.	In school going children; the aug height velocity is
0	In school going children; the aug height velocity is ->5-8 cm
90	
0	
We	osite: http://mbbshelp.com WhatsApp: http://mbbshelp.com/whatsapp

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Date/ Page	۵
Hood cinquisterence:	0
Head circumterence: 35 cm at birth	•
· 3 moults -> 40 cm	0
· 12mouths -> 45cm	•
· Zyrs -> 48cm (90% of brain grows)	•
· 2yx → 48cm (90% of brain grows) · 12yx → 52cm.	٥
	0
Brain	_
	•
	•
Zyra Age	•
Age Age	0
	0
Lymphoid growth:	•
	0
	•
	<u> </u>
	0
	•
Ayr 8yr	©
Good worth i	
Gonad growth:	-
	-0
	0
	0
1 Puberly	0
→ — — — — — — — — — — — — — — — — — — —	Ð
	۵

	125
	Date
0	Adologent - 10 to 19 cm
0	Adolscent - 10 to 19 yrs.
10	Januer's Sexual Malurily Raling:
0	Januer's Sexual Malurity Rating: SMR Stage I - V Stage I - No Character Stage V - Completely developed.
0	Stage I - No Characler
	Stage V - Completely developed.
	Menarche 1 -> SMR-IV
	Sequence of puberly: Girls:
	Girls:
	Growth-Spurt -> Thelarche, Pubarche, Menarche.
Ĭ <u> </u>	, and the state of
	Boys:
	Boys: → Jeslis - Penis - Pubic hair, Anillary hair.
	l)
	# Girls: BP (Breast — Pubic hair) Boys: GP (Genitalia — Pubic hair).
	Boys: GP (Genetalia - Pubic hair).
<u> </u>	
ို 🍳	SMR 1 2 3 4 5
	Girle Height volvaity Menarche.
	Girle Height with volocut
_0	Gera
Ŷ - Ŏ	4
-0	100city
	Boys. Height to
 0 	Boys. Height velocity Wit velocity Testis granith
) 0	Testis
0	
0	
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	•
126	5
Date/	. •
# Most rapid 1 in height -> Phase 3 in girls 2	0
# Most rapid 1 in height -> Phase 3 in girls 2 Phase 4 in boys.	0
	•
# Puberly - comes by pulsatile release of GnRH.	•
	0
Precocious Puberty:	0
- Gonadolropin dependent/Central	
- Jewales - Idiopalhie.	
- Males - Organic	
(Hypothalamic Hamarloma,	-
	Ö
Eranio pharyngiouras, Hydroceptalus, TBM).	0
Tylou ceptions, 11514).	0
CAH (Carachital Adams by humania):	0
CAH (Congenital Adrenal hyperplasia):	0
Mijeje of Lemale mermaphoralte.	
M/c/c of female hermaphordite. Karyofype — XX But looks like Male.	
BUT COOKS LIKE 14/all.	
Cholesterol ->1DHEA	•
90% 21-0H + 170H progeoterone 1 Jestoslerone hydroxylase : X	<u> </u>
yethery x X	0
V V	0
Corlisol Aldos Gerone glucose V Na V	Ø
glucose V Na+V	<u>Ö</u> _
Salt-Wasting Crisis (70%)	ô
1 K+	
Shock	
- Cause of precocious puberty en boys	
Genitalia -> Ambignous	
Genitalia -> Ambiguous Labia is pigmented d/t ACTH.	٥
Virilization	0
- Virilization Hypertrophy of clitoris	0

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	Date
0	
0	- Penoscrotal hypospadias + Empty Scrotum.
0	Carpty Scrotium.
0	# Due lo deticience of 21-0H hydroxulase lead to
0	# Due to deficiency of 21-04 hydroxylase lead to accumulation of 17-04 progesturene.
	Q Level of 17.0H progesterone in CAH A> < 150
	A> < /50
	B) 150-300
	C) 300 - 500
	LAY > 600 (>3500)
	# CAH associated & Premalure Epiphyseal Closure.
	V
	Short Stralure ·
9 .	P
	R: CAH
0	- Supplement of Hydrocorlisone & Fludrocorlisone
0	Characticosed Minus de auticoida
	Glucocorticolds Mineralocorticolds.
	15-20 mg/m²/day 0.15 mg/day.
0	Thrice daily.
	-Girls require Sx
	- Cliloroplasty
	- Recontruction Sx.
0	- Recontruction Sx Never get married.
	U
	# Cholesterol -> DHEA
	11-decrycortisel DOCA: potent
0	11 B-UH Tuineralocorticoed
0	deficiency Corlisol Aldosferone HTN
	Hypokalemie metabolie alkolosis.

	. 128	
	Date! Page	٥
Q.	5 yrs old bay has precocious puberto. BP = 130/80	0
-	5 yrs old bay has precocious puberly. BP = 130/80 Estimation of ⊆ help diagnosis?	0
	A) 17-04 progesterone	0
	A) 17-04 progesterone (B) 11-deoxy corlisol c) Aldosterone	•
	c) Aldosferane	•
	D) DOCA	•
		O
	Deficiency of 17 d-Hydroxylase -> 1 Aldosferone	-0-
-	WEN Huboles la wea	Ö
	HTN, Hypokaleme c. metabolic alkalosis	0
	mejasoue accuss	0
	-> X Corlinal	0
	-> X Corlisol I glucose.	0
	<i>(</i>)	0
	-> X Testos ferone	0
	₽ ✓	•
	Male look like ?.	٥
		٥
	(Mineralocorticoid) M T (Testesterone).	0
		Ö
	2 1	_
	7 7	_0_
	 	Ö
	\uparrow	-
	,	-
	# 3 B Hydroxysteroid dehydrogenase deficiency (3BHSD def.)	0
	V/	
	Causes ambiguous genitalia in Both sexes.	٥
	U = U	•

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J			0atz
9	•		Page
		Q.	Mother; previous child CAH Next pregnancy — To prevent female varilization of foetus
0	0		Next pregnancy - To prevent female varilization
0	0		of foetus
6	0		
0	0		Dexamelhasone
	0		(20 mcg/kg prepregnancy 10f.)
1	0		· · · · · · · · · · · · · · · · · · ·
1	_		Juhibili ACTH.
I	-0-		MEAN
1	0		
1	0		
I	6		
I	0		
1	0		-2 68% +2
1	0		95%
7			-3
9	0		99%>
9	0		Short height > - 2 SD below mean or < 3rd percentile
9	9		
9	0		Mid parentral height = Adult predicted height
9	•		
9	0		Boys = average parents height + 6 Seus Gals = " " - 6.5 cms.
9	0		gals = " " - 6.5 cms.
<u></u>	-0-		Comment of the state of the sta
% -	O		Causes of Short Stalure:
4	0		Politica in the second
4	0		Physiological Palhological - Malutifique
O	0		- Malnutrefeau Constitutional Familial - Chronic illness
	0		(M/c) - Celiac disease
	0		(Present at 6-18 months
	0		as maker in troduces wheat now
	0		-Genetic - Jurner

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130	•
Date	۵
R: Celiac ds	•
	2. 0
- Restrict Wheat, Rye & Barley for lifetime - Glulen - free deet.	0
- Also avoid oats.	•
	•
\checkmark	
- Endocrinal → Hypothyroid	٥
Cushing	
Cushing CAH GH defictioncy.	
GH deficiency.	
GH deficiency: - Birlh weight & length normal. - lag at 1-2 yrs of life. - Bone age delayed. - Doll face 7	•
- Birlh weight & length normal.	
- lag at 1-2 yx of life.	0
- Bone age delayed.	٥
- Doll face	0
- Micropenis Panhypopituitrism	•
- Short slature	0
	9
# Micropenis (VLH, VFSH)	٥
J. ACTH → Hypoglycemia	0
01-0-0	
- Hoarseness of voice.	
INV: GH level => 1GF, BP3	
GH stimulation test - Best	
La Basal level GH	0
Stimulated level - 2 Stimuli	
(Clouidine; Insulin; L-arginine)	٥
R - Recombinant GH (US, FDA)	0
12 1/2000 (1900)	

9	0	
	•	131
	•	Date
7	0	O diantia : VCII
	0	Indication: rGH
7	0	- GH deficiency - Jurner Syndrome
9	0	- Prader villi
9	0	
9	•	- Chronic kidney ds. - SGA height - 2.25 SD below mean
9	0	
9		When to stop GH ?
9		- Height seaches 50th centile
0	-0	- Height reaches 50th centile - Epiphysis fuses Pseudotumor cerebri
P		- Pseudotumor cerebri
9	0	- Slipped apital femoral epiphysis
		
<u></u>	•	Disproportionate Short strature:
9	0	Disproportionate short strature: US/LS 1 → Achandroplasea, Rickels;
	0	Hypothy roidesin.
(0	US/LS 1 → Achandroplaseà, Reckels; Hypothyroidesin US/LS V → TB spine, Mucopolysaccharoidesis IV (Morquio's ds)
Ó	•	(Morquio's ds)
ø	0	
0	0	Physiological Short Stature:
0	0	
(<u> </u>	CONSTITUTIONAL (M/e) FAMILIAL
0	0	Birth length · (N) 1UGR
	0	Lag 6-12 months
1	Ŏ	Growth velocity (N) Less
1	0	Final Height ()/Sub() Less
I		Puberty Delayed 10 9
I		Birth length · N 1UGR Lag 6-12 months Growth velocity N Less Final Height N/Sub Less Puberty Delayed N Bone age Delayed N \$\frac{\partial}{2}\$ Pelayed N \$\frac{\partial}{2}\$ Bone age Delayed N \$\frac{\partial}{2}\$
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		Date///	0
		Page	4
Devel	osmental milestones:		0
	opmental unleslowes: Veck holding -> @ 3 mo	ulti.	0
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	Date
10	
	Gross molor unleslones:
	3 moultis - Head holding; Neck holding.
	5 moultis - Sitting & support.
0	4-6 months - Prohe to supine, supine to prone
0	(Roll in bed):
	8 maulte - Sitting Éaut Support.
0	9 moultis - Crawling
-	10 " - Creeping; Stand & support
	12 ' - Standing cout support; walking cout
1	Support.
10	2yr - Walk up stairs ō livo feet at each step
1	3yr - Upstairs è one foot at each step, rides lucycle.
	Gyr-Hops on one foot
<u> </u>	5 yr - Skips on two foot
	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
0	
(• • · · · · · · · · · · · · · · · · ·	Fine molor:
† •	12 wks -> Moro's reflex desappears
©	Grasp reflex disappears 4 month — Goes for objects
0	4 month - Goes for objects
0	5 mouths - Bidextrous grasp.
<u> </u>	6-7 "> - Transfer Object, palmar graup.
	5 months — Bidextrous grasp. 6-7 ?? — Transfer Object, palmar grasp. 9 ?? — Pincer grasp; malure neat. 13 months — Casting.
O • •	13 months - Casting.
	15" - Self feed c a spoon
	18 " - Self feed à a cup.
	18" - Seef feed \(\bar{c}\) a cup. 24" - turns pages \(\bar{o}\)f a book one at line.
00	1 0 0
© 0	
60	
Wo.	

	1	•
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	Date Page	٥
	Social Mileslane:	0
	2 moultres - Social smile	0
	3 " - Recognizes molher.	0
	6-7 " - Smiles at mirror mage.	0
	9 moultis - Waves bye-bye.	6
	6 mouths - Stranger anxiety.	0
	2yre - Dry by day	_0_
	3yrs - Dry by night	-@-
	Dress / undress hunself (Supervision)	—
	<i>t</i>	0
	E out supervision - Syrs.	8
		0
	18 month - Seperation anxiety/ Clinquiess/Reprochment.	0
		0
	Language Milestones:	0
	1 mouth -> Head lurus to sound	•
		0
	3 months → Cooing 6 months → Babbeles; Monosyllables (ma, 6a)	0
	9 montrs -> Bisyllables (maria; 69-69)	Ö
		0
	1 yr → 2 words c meaning 18 months → Vocabulary of ten words.	0
	Zyrs -> Suingle sentences & Zwords; Phrase.	<u> </u>
	3un -> tells age & sex; uses pronouns.	<u>Q</u>
	3yn → tells age & sex; uses pronouns, handedness; identify colours.	_ _ _
	4yrs -> tells story	_ U -
	4yrs → tells story 00 5yrs → Knows colour	
	· ·	
	15 months: 4-5 words	-
	2yrs -> 50-100 words	0
	U	0
		0
11	1	100

0	11	
9		
0		. 135
-		03te
0	#	When can a child understand death =
0		< 3yr - Nordea
0		< 3yx - Nordea 3-9 yx - Idea
0		>9 yrs - Entity; Irreversible; himself
0		
0	#	Object permanence / Constancy - 9 mouths.
10		Object permanence/Constancy — 9 moulhs. Cross a busy road — 10-12yrs.
10		Jie Shoe lace — Syrs. Bladder control — 85% by 5yrs.
		Bladder control - 85% by 5yrs.
0		Nochurnal enuresis - >5 yrs.
(i)		Noclurial enuresis - >5 yrs.
0		
O		D. 14 urs old child & Nochurnal enuresis
()		Q. 14 yrs old child € Nochurnal enuresis R - · Behavioural - +ve reinforcement.*
O		· Alaru Sherapy (Best)
		 Aların lherapy (Best) ⇒ 85% relapse free rales. Drugs → Desmopressin
(i) (i)		· Drugs - Desmopressin
0		,
(#	Encopresis: > 4 yrs Cause → Chronic constipation
O	·	Cause -> Chronic constipation.
(1)		
() ()		
00		
<u></u>		
() - 0 -		
00		•
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(0		
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6 0		
10		

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	Date	٥
	CNS	0
		0
	MICROCEPHALY:	0
	→ HC> -3SD below mean	0
		•
	Causes: GENETIC ACQUIRED	0
	- Tusony 13, 18, 21 - Baby: HIE; Hypoglyceme	à o
	- Cri-du-Chat Spoelelien PKU, Meningitis,	
	encephalitis.	-0-
	encephalitis. - Mother → 70RCH, Idlenine	-
	Hyperpheny> 6mg/dl	-
	Alcohol, DM, Radiation.	6
		<u> </u>
	MACROCEPHALY	_
	HC>25D above mean.	
0		_
<u>y</u>	Neurodegeneralive disorders:	_
	GREY MATTER:	0
	- Normal at birth	
	- Regression milestones.	_
	- Doct Wind coisuses.	
	- Deat, blind, seizures - Anguia Hopatocolegnousgalu.	
	- Anemia, Hopatospleenomegaly.	
	- Cherry red spot macula!	
	Microcephaly Macrocephaly	
	- GM 1 gangliosidosis GM2 gangliosiodosis	
	r-Gauchers ds (Tag Salen's al)	-
Huge	(B-gluco - Sandhaff	-
Spieen	L- Niemann Pick's de	•
		•
		٥

9	•	VLCFA = Very lon	g chain Fatty acid.
	0		137
			Data
	0	Jay Sach's ds -	
	0	- AR	
7	0	- D/t deficiency of	- B-hexose aminidase A.
	0	- 1/25 askenazi	Jew are Carrier.
1	0	- 6 months exagger	ated slartle reflex.
1	0	- Cherry red spot u	racule
	0	- Organowegaly no	f seen.
9			
		Organo wegaly + J	Pay Sach's = Sandhoff
9			1 00
		Dof.	of B-hexase aminidase A&B.
		0	
	0	WHITE MATTER DISORDERS	:
	9	- All the tracts are	
	0	- Frequent fall, wice	
0	0	- Upper ulslor neur	
	0	1/	- J
0	0	Microcephaly (N)	Macrocephaly
	•	Microcephaly (N) - Krabbe's	- Canavan ds.
	•	- XLR adrenoleukodystrophy.	- Alexander ds.
	0	1	MRI - Diffuse while matter
	0	degeneralion Starts from	thickening.
Ĭ_	0	parielio-occipetal area.	→ MRI → Diffuse while watter thickening. → MRI → Degeneration starts from fromtal periventicular area.
Ĭ_	0	parielö-occipetal area $\Delta \rightarrow \uparrow VLCFA$ levels	frontal periventicular and
	0	R -> Early bone marrow Tx.	The state of the s
-		Lorenzo oil	
T		- Meta chromalie	
7		leukodystrophy	
		J / J	
	0		
	0		

	138	0
	Date	Ö
	Hydrocephalus:	0
	Hydrocephalus: - Enlarged ventricles \(\bar{c}\) or \(\bar{c}\) out \(\bar{l}\) in 2CT.	0
		0
	CSF production:	0
	- Charoid plenus (75%) → Caleral, III & IV ventricles.	•
	- Extrachoroidal (25%) → Capillary endothelium.	•
	- Extrachoroidal (25%) → Capillary endothelium. Un brain parenchyma.	۵
		A
	# Rate of CSF production -> 20 ml/hr.	_
	CSF volume in infants = 50 m2	-
	# Rate of CSF production -> 20 ml/hr. CSF volume in infants = 50 ml adults = 150 ml.	
		0
	CSF flow: (2) (2)	0
	Obstructive/non-	0
	Obstructive/mon- communicating.	0
	 	•
,	f Aqueduct O Aqueductal Stenosis IM/	48
	IV @ Aqueductal gliosis	٥
	1 3 Arnold Chiari Malfornation	, O
	Basal Cisterns 1	5
	Downward displacement	
	2 hypoplasia in cerebelleum	
	leading to obliteration of	۵
	cisterna magna.	<u> </u>
Ì	Arnold - Chiari Type I - Adolescent/Adu	- - -
	Jupe II - Newborn/c	
	lumbosacral myelomeningococo	u:
		<u> </u>
	(4) Dandy - Walker Syndrome:	
	> large cyst in posterior fossa communicating	
	o large cyst en posterior fossa communicating	•
	- child has cerebellar hypoplasia	9
		0

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	Date
0	B) Vein of Galen malformalion: - M/c arlerio venous malformalion en brain
9	- M/C arterio vendus maiformation en Grain
0	- Since Venosus ASD.
	- Obstructs aqueduct Midline mass è dilated Caleral ventrècle.
0	- Midule mass & difuse aleral ventricle.
0	Mon obolatichina / communication:
9	Non-obstructive/communicating: Basal exudates
-	
-0	Cryptococcal meningitis.
\	Oupprococcue acentigetis.
	IDC for appropriately Hudrocophalous - MDI
0	IOC for congenital Hydrocephalous - MRI.
0	R: Drugs -> Furpsemide
0	Acelázolamide.
0	R: Drugs → Furosemide Acelazolamide. VP Shunts → anastomose by ventricles to
Ç 0	VP Shunts -> anastomose lagar ventricles to peritoneum. Gross hydrocephalus Shunved parenchyma. Complication - Blockage Infection (Coagulase -ve Staph).
0	4 Gross hydrocephalus
0	4 Thinned parenchyma.
6 0	> Complication - Blockage
0	Infection (Coagulase
50	-ve staph).
0	/
0-0-	,
J. 0-	
<u> </u>	
5 0	
50	
90	
00	
. O	
00	

- 11			•
		140	
		Page	•
	Febrile Seizures:		0
	- M/c seizure during c	hildhood.	•
	- Between burouth - 5y	n.	0
	<u> </u>		Ö
	R/F for recurrance:		•
	Major:		0
	Age <td></td> <td>0</td>		0
	Duration of fever < 24 m Fever 38-39°C (100.4-	••	
		102·2°F)	_6_
_	Minor:		
	Jamily H/O Jebrile seizu	res.	-
	Family 4/0 epilepsy. Complex febrile seizures	**	-
	Complex febrile seizures		-
	Xaycari		_
	Male gender.		
$-\parallel$	Lower Serum Nat at lu	une of presentation.	8
		<i>V</i> 1	•
-	# Having no risk factors co	urrics a recurrance risk	•
	approx 12%		0
	$\frac{94 \frac{1}{2} R/F \rightarrow 25-50\%}{2 $		•
	2 4 → 50-59 ½		0
	/3 → /3-100) /c .	<u> </u>
	b/o		
	Citable Call Call	Riok for Subsequent Epilep	sy o
	Sémple febrêle. Seizure Recurrent " "	1%	<u> </u>
_	Recurrent " " " " " " " " " " " " " " " " " " "	4 %	
	(>15 min devalion or	6%	-
	recurrent c in 24 hr)		0
		11%	0
	Jever <1 Gefore febrile scizure Jamily H/O epèlepsy		<u> </u>
	Neurodevelopmental abnormality (Mental Retardation).	<u>18%</u> 33%	
	A LA LA DA LA	33 /°	

	Nate 141
	DatePaga
	Comular lebrila reizuse complication:
	Complex febrile seizure complication:
	- Prolonged febrile seizures. MRI → Mesial temporal sclerosis
	Temporal losse + Hippocampal losse.
10	
	Epélepsy in Children:
	Partial:
	·Simple
	· Complex - aura; automalisms.
	R - Oxcarbamazepine & Carbamazepine.
	0)
	Ring Enhancing lesions.
O	
(<u>)</u> ()	Neurocysticercosis Juberculoma.
(O	- Solitary - Large > 20 mm
(- Scolex - Multiple
	& - Albendazole (DOC) - Gregular margine
©	- Perilesional edema
() ()	
<u> </u>	Before giving Albendazole - Midline shift. 3-5 days of steroids given.
<u> </u>	
() () () () () () () () () ()	Generalised epilepsy:
\$ -	- Toruc
\$ -	- Clonic
0	- GTCS [aura - GTCS-] post ic tal phase]
0	V
	Drowsy, unconscious,
0	froathing, tourque bite
0	aprolling, incontinence.
9	- Atonic - Myotonic
	- Mystonic
	II

11	
. 142	
Date	٥
R - Sodium Valproalé.	
\ \lambda \ \	•
Ju <2yrs → 2+ is hepato toxie.	•
	•
Absence Seizure:	•
- Blank stare < 30 sec.	۹
- No aura/post ictal phase.	
- Hyperventilalion provokes.	
<i>V/ J</i>	
R: Ethosucimide (DOC)	•
R: Ethosuciunide (DOC) Valproale	•
	0
Alipical Absence Seizure:	0
- Myoclonic component	0
Alypical Absence Seizure: - Myoclonic component R - Valproate	. 6
	•
JME (Juvenile Myo Clonic epitepsy):	0
- 12-18yrs.	٥
- 12-18yrs. - Myoclonic jerks morning. - Drops things.	0
- Drops things.	Ö
1 Gene of gene	<u> </u>
- Jamily History GTCS seizures 90% - 1/3 Absence seizures.	
- GTCS seizures 90%	
- 1/3 Absence seizures.	
EEG of IME -> Generalised 4-6 Hz spike	-
EEG of IME -> Generalised 4-6 Hz spike + photic stimulation.	Ô
R- Valproate (lifelong) -> Excellent.	0
	C
	•

	143
10	Date
0	Infantile spassus / Salaam / West
0	1 - Flexor contractions of Head, Crunk &
0	extre mileis.
0	- 4-8 moultis
0	- EEG -> HYPSARRYTHMIA
0	Generalised Chaolic high
30	I rolume slow wave.
10	- Idio palhic / Cryptogenic → Good. - Secondary → HIE, Structural mattermation, Down's Syndrome, Interoms
Jo-	- Secondary -> HIE, Structural malformation,
10	Down's Syndrome, Inberous
	sclerosis.
	R:- ACTH → inhibit CRH. (DOC).
	Vigabalrin -> In Juberous Sclerosis
	STATUS EPILEPTICUS:
	- Convulsion > 30 min
	(OR)
	Continuous yw no regain of consciousness.
0	Vulnerable to hypoxia - Hippocampus, amygdala
0	Vulnerable to hypoxia — Hippocampus, amygdala Thalamus, Subcertical areas.
00	
(D	K: - i.V. Lorazepaun (DOC) - longer t/2 0.05 mg/kg
P	0.05 mg/kg
P	- Midanalan d Dia di da di
()	- Midazolam + Phenytoin (20 mg/kg)
	Repeat 10mg/kg _ 10 mg/kg
	Phenobarbétone 20 mg/kg - 10 mg/kg
20	Midazelam intraine 2-30 mg/kg
© •	Miduzolam infusion 2-20 mcgf kg/min.
50	GA proposol; Phiopentone.
10	1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
100	11 Mata Anni http://mbhahala.com

		144 Date	•
		Date Page	
M/c/c of	Status epîleptic	us → Febrile Seizure	٤.
, , 0	7 /	. 1	
		R → per rectal diagep	am/
		R → per rectal diazep Buccal midazolan	r /
	-,	<i>U</i>	
Prevenle	can of Febrile Se - No need	izures:	
•	- No need	<i>O</i>	
_	Risk of Recurran	ice/concerned parents	
	<i>U V</i>	/ /	
Intermittent p	rophylaxu Oral CLOBA	AZAM / DIAZEPAM	
	70 G _A	Yew BZD	
	for 48-72	has of fever.	
		0 0	
MENINGIT	7 <i>S</i> :		
Cayse:			
	India	World	
<2 months	Klebsiella	Gr.B/D Streptococc	<u>.</u>
	E·coli	E·coli	
	·		
2 months - 3yrs	H. influenzae	S. preumeniae.	
V	type B	/	
	///		
	(J)		
>3yrs	2 : 2	r S. preumoniae	
>3yrs	S. pnenmonia	s. S. freumoniae Nisseria	
	S. pneumonia	S. preumoníae Nisseria	
Acule Bacle	S. pnenmonéas		
Acule Bacle	S. pnenmonéas		
Acule Bacle	S. pnenmonéas		
Acule Bacle	S. pnenmonéas		
Acule Bacle	S. pnenmonéas		Sy Heun
Acule Bacle	S. pnenmonéas	S. preumoniae Nisseria with to Syx. Tem Cs-C8 & properdin declion: y-AIDS/Chemotherapy) ytogenes/cryptococcus.	

7 0	. 145
	Data
0	- congenital/acquired defects across mucocutaneous
0	barrier -> Pnemnococci d/t cribii form plate.
0	- Lumbosacral meningo myelocele & dermal sinus -
0	Staph. & enteric bacleria.
0	- Penetrating CNS trauma / CSF Shunt infection
10	- coaqulase -ve Staph.
10	
10	# Recurrent meningitis in CSF leak pt. M/c d/t
70-	p neumoco cons.
	# Autospleenecloury (Sickle cell dystunction asplenia)
	-> Parunococcal infection]
	→ Parennococeal infection H. influenzae capsulated.
0	Nizseria)
(Spleenecloury vaccination time - Zwks before.
(
() ()	R: Cet l'ia noue (DOC) Doc en Resistant puennococci = Vanconnyein
(T)	Doc en Resistant prennococci = Vanconyen
ф <u>Ф</u>	+ Cef triazone.
O	M/c Neurological sequel of meningitis:
60	· SNHL: via aqueduct cochlear.
0	· Can we prevent SNHL ?
\$ - \oldots -	- Dexamethasone
6	- 0.15 mg/kg
0	- 30-60 mins before antibiotecs.
0	
10	Post exposure prophylaxis to contants & doctors - H. influenzae & Nesseria - im Single dose
	H. influenzae & Nesseria -> i.m. Single dose
	Clf lri gaone.
0	- Ritampicin X 2 days
	Doelors -> Fluoroguinolones.
	ν

	146 Date	•
	Page	٥
Q.	3 yrs old diagnosed to have HiB meningitis. Ix done	0
	before discharge -> BERA. (Brains/ein evoked response audiometry)	•
	(Brains/ein evoked response audiometry)	0
	ENCEPHALITIS:	•
	M/c/c = Entero viruses (80% cases).	•
	M/C sporadic = HSV-1	_
	M/c aseptic meningitis in unimmunized children — mumps.	_0_
	- mumps.	
	A 2111 - 1	-0-
	J. Child & Lever & coma	-0-
	Focal seizures	6
-#	CSF: Hemorrhagic	6
	CT: Temporal hypodeuse; MRI → Hyperentense	-
	- HSV-1 unfection.	0
-	Localised lemporal spike -> HSV encephalilis.	_
-#	NOGA SUM AND SUM	_
	DOC: i.v. Acyclovir.	-
$-\ $	Mortality rate of entrated harter - Tosh	
	Mortality rate of untreated herpes = 70%.	-
\parallel	AERI Acult Marcid basalucis).	
-	AFP (Acule Flaccid paralysis): - Acule onet < 6 weeks	
-#	- < 15 une	
	- <15yrs - Rule out pseudoparalysis Septic arthritis Osteonyelitis	
	Septic arthretis	
	Osteonyelitis	•
	Oscurvy; early syphilis	-0
	Hypokalemea -> Hypotonia.	٥
- 11		
	- Asymmetrical AFP: Paralytic polio.	0

	. 147
0	Date
0	· Traumalie neurilis > im injection (d/t)
	(of)
0	- Symmetrical AFP:
	· Iransverse un dilis
10	- Symmetrical AFF: Transverse my elilis Herpes, Varicella, mycoplasma Level - Thoracic and :
lo	Level -> Thoracic area:
10	R: high dose iv Melhijl prednisolone.
10	· Guillian Barre Syndrome (AIDP)
1-0-	4 Demyelinaling.
	- Diarrhea (By Campylobaelet jegunii).
	- Weakness occurs after 10 days.
	- Areflexia (DTR absent)
	- Symmetric
	- Ascending -> diaphragme involved.
0	- Plateaus -> 4wks.
	- Sensory & autonomic changes.
	- Also dit Mycoblasena: calmonolla.
0	S. preumoniae.
9	
0	CSF 1St wk 2nd wk
0	Celle 10/apf 10
0	Profeire 50 mg/dl 500
0	
 -	- Albuminocytological dissociation
-	V V
1	- B/L symmetric demylinating illness.
Lo-	
	IOC for calcification: CT scan.
ha .	
0	R: i.v. 2g (2g/kg)
.0	k: i.v. 2g (2g/kg) I fails
•	Plasmapheresis.

				148	•
			/ \(\D\) \(\V\)	DateI	•
	Iv 19 in	dicalions:			0
	4	dicalions: > Kawasaki			•
	ل	ALDP (Aculé inf Hypogammaglo	lammatory De	myelinating Polyradicule	
				() () () () () () ()	10
	لئ الم	Rh iso i monunis	salion.		•
	General Pea				_0
		'arrhea			-0-
	- OF				<u> </u>
	- Z	inc Valnutiliàn:			-
	\ \sqrt{ \qua	· · · · · · · · · · · · · · · · · · ·			<u> </u>
	ORS:				0
Resom		OLD (WHO-ORS)	New	Universal	•
45	Sodium	90 (Cholera	stoot'loss)	75 (Rotavirus SO)	0)0
40	Potassium	20		20	0
. 125	Glucose	///		75 (For facilitate diffusion of Na in cell)	•
·70	Chloride	80	6	55 is cell)	•
7	Citrale			0	 (
+Mnzr		311		45	<u> </u>
300			low osu	iolarity ORS.	
	# Cikala w	brown the sall live	1. d DDC		<u> </u>
	THE CONTRACT CONT	broves the self lig			
	# Resonal ->	Rehydration Sol	a for malue	elri fiòn.	 -,
				,	<u> </u>
		+	Typerkalemia	Hypernatsemia.	-
				V .	-
	Subotrale conc	entration of comp	bonents of ORS	soln:	
	Nacl	- 2.6gms	<i>U</i>		
		- 1.5 gms	.90.		-
	Glueno	'um citrale - 2 , anhydrous - 13.5	- 1 zm		0
	- January				

(•	
	149
0	DataPaga
0	WHO dehydralion:
0	· Na V
0	· Some -> Skin pinch slowly; thirsly · Severe -> skin pinch very slowly; lethargie; oliquia.
	· Severe -> skin pinch very slowly; lethargie; oliquia.
0	
	R: No dehydralion:
<u></u>	- Replace ongoing losés 5-10 my kg.
<u> </u>	- 5-10 my kg.
	, (
	Some dehydralion:
<u> </u>	- ORS 75 vorl/kg over 4 hrs.
<u> </u>	, v
	Severe d'etydralion:
	Severe d'etydralion: - i v. Ringer lactale 100 ml/kg.
9	
0	30 ml/kg 70 ml/kg
0	>1 yr 0.5 hr 2.5 hrs
0	<1 yr 1hr 5hrs.
50	· · · · · · · · · · · · · · · · · · ·
<u> </u>	WHO Zn in Acule Diarrhea:
	- 2XRDA for 2 weeks.
<u> </u>	2/2/2
<u> </u>	Zu dose RDA Diarrhea
_	>6 months 10 mg 20 mg.
J. (3)	\$ 55Mg 10 VIO
្ន	Acodonyatiti antropathica / periositical dermatiti
7 0	- dlt Zu deticience:
<u>~</u> •	Aerodermatitis antropathica (periorificial dermatitis) - dft Zn deficiency. - Nulritional
0	- Gonolia (AR) → Interlinal Zn
0	- Genelië (AR) → Intestinal Zn transporter defect.
0	- Low. In levels.
(0)	
	†

			Page	•
	- Im	prove on In supple	ment.	•
	R - I	In (3mg/kg) -	elemental Zn.	•
	~	9, 9		•
	Malnula	ilion:		•
		Marasuus	Kwashiorkar	
Dirock	e Wasling	++	++	
7434	Edema		+ +	_
			++	-
-#	Hepato wegaly Low albumin		++	-
			++	
	Proment	Voracious	Poor	•
	Apetife			•
	Sensorium.	Alert	le/harqy.	•
		· · · / 1		١ 🕯
	Weight/A	ge Crilena (Indi	an Academy of Pediation	
		al >80% refrence	,	
	,	1 → 71-80 4/ ₂		
	•	II → 61 -70%	·	
	- Grade	111 → 57 -60%		
	- Grade	$N \rightarrow 450\%$		
	for Eq	dewa ⇒ Add K		
	′ 4	Jewa ⇒ Add K Bad warker·		è
		[WHO]		,
		Moderale	Severe	
	Weight/Height	71-79%	≤ 70	
18				_
	Acule (Wasting)			
	Aculé (Wasting) (N):> 80% reference	······································		
	(N) > 80 % reference	e.e		
	(N) > 80 % reference	na) 86-89%	< 85%	
		ig) 86-89%	< 85%	-

	0	
I	9	Date
		Page
	0	Symmetrical Edema ++++
	•	Mean
	0	
	•	
1	0	
1	0	
1	_	
1	-0	-severe-
1		-3 -2 -1 SD
1		Moderale
	0	
	0	Severe Acule Malnulrilian:
	•	Amog children - 6-59 moultes of age.
9		Any of the following:
9	0	1 Whight for height below -3 Standard deviation
9	0	Amog children - 6-59 months of age. Any of the following: (SD or Z scores) of the median WHO growth-
9	0	
9	0	3 Visible severe wasting.
4	0	3 Presence of bijedal edema.
9	0	3 Presence of bijedal edema. (4) Mid-arm circuluference below 11.5 cm.
-	0	
Ç-	0	Below burnthe -> Mid-arm circumterence can't be used.
_	0	can't be used. V
<u>_</u> -	•	
<u>_</u>	0	Criteria for admission - If child fails apetite test.
	0	
	0	Créteria for passing Apetite test.
	0	Body wt. (kg) Minim amount of RUTF (Ready to use.
	0	therapeutic factor) to be consumed for passing Apetite test (ml or grams) (4kg 1570L
		DASSING ADELLE FORF (141 A ORGANI)
-	0	(4kg
	0	< 4kg 1570L 25 mL

į.	152	@
		0
	7-9-9 35 mL	0
	10-149 50 mL	•
		0
	\mathcal{M}_{X} :	0
	Complications of SAM	0
Mx c	in 15 = Sugar (Blood Sugar < 54 mg/dl (PR) (3 mund/L) day LH = Hypothermia (<95.5F (PR) <35.5°C)	Ö
	day LH = Hypothermia (<95.5F (OR) <35.5°C)	_0_
in 1	twk ←I = Injections (TB, Malaria, UTI)	<u>-</u> @-
	EL = Electrolyte (Hypokaleunia & Hypernatreunia)	_ <u>()</u>
	DE = Dehydralion	_a
	D = Deficiency of Vitamine & nunerals	-
	U U U	-
	PHASE	•
	STABILIZATION REHABILITATION	•
	Step Day 1-2 Days 3-7 Weeks 2-6	0
1.	Hypoglyceuna	0
2.	Hypotheruia -	0
3.	Dehydralion —	0
4.	Electrolytei -	0
5.	Infection -	Ö
6.	Micronutrients No iron c 27057	0
7.	Cautious feeding -	ê
8.	Catch up growth.	_0
9.	Sensory stimulation	<u>—</u> @
10.	Prepare for follow up.	@
	, , , , , , , , , , , , , , , , , , , ,	
	Feeding Rehabilitation: Caulious feeding	-
	- F- As Containing 75 K calf 100 ml & 0.99 protein/100	n/.
	B = Begin Feeds	
	E = Energy deuse feeds.	
	S = Stimulation	
	T = Tender Love & Care	è

0	1 1			Date
0				Paga
0	Daye	Frequency	Vol/kg/teed	Vol/kg/day
0	1-2	Zhrly	/ () · () // ml	130 ml
0	3-5	3 hrly	16 ml	/30ml
0	6-7	4 hrly	2 Zml .	/30 ml
0				
0	Energy	dense feeds:		
~0		the transilion		
<u> </u>	0.	Frequent feeds	(at least 4-hely) of unlimited
		amounts of a	catch-up form	uilg.
	•	· 150 -220 kc	if kg/day!	
	•	4-6gu profein	/kg/day:	
		· · · · · · · · · · · · · · · · · · ·		
0	Criles	ta for dischar	ge:	
O	- Wee	ght for height	> 80% of Reference of absent for 20	ice slaudard.
0	- Ed	ma should l	be absent for 20	wks.
0	- MA	1C > 12.5 cm.		
<u> </u>	- We	ight gain > 5g/1	kg/day X 3day	٤٠.
<u></u>	- Ape	tite is good		
© ©	- Cou	uplele antibioh	îcs. have learnt, m	
<u>0</u>	- Car	e taker should	have learnt, m	olivated.
<u> </u>			0. 0.7 / 1. 1.	`
0	Weigi	nt for age	Aculi (Wasting Chronic (Sturting)
<u>C</u>		, , ,	Chronic (Sturrting)
()	0		1100 /	2/2/50-1
○ •	Hge en	dependent crite	nia - MAC (>/2·3 cm)
00			9W 1 70	2 975.
O	179e engepe	many ingere —	Kanawahi & M	claren engex
©			Duadala	LUGEX
©			Rao & Singh Dugdale inc Quac stick under Teliffe ralio	/ex ·
₹ 6			Telitte salin	X
(0			00000	
(9				· · · · · · · · · · · · · · · · · · ·

	154	•
	Date Page	6
# Douglality = 9 XINGT		6
# Usundately - & x[Na]	+ [Glucose] /18+ [BUN] /2.8.	•
Pedialric Nephrology:		0
- Development	7	0
- Development - Ouguria : poiyuria - Hemaluria		0
- Hemaluria		6
- AKI	Topic	<u> </u>
- CKD		
- Nephrotic, Nephritic		_
- 071		-6-
Development:		0
GFR:		8
Newborn → 15 - 20 ml/ m	iv/1.73 m ²	0
· 3 months -> 2/3rd as	,	
· Like adults -> 2yrs	of life.	•
	UU	•
- Tubular conc ⁿ :		
· Adult morning ur	me osmolatily >800 mosm/kg.	•
· like adult 1yr.	une osmolatity >800 mosm/kg.	•
		0
- Nephrongeneses complete	e @ 36 wk of gestation.	_
		<u> </u>
- Barker's hypothesis:		0
preferm & IUGR -	→ hypertension in 2nd to 3nd deca	रहेल्
	Bicoz they have less	_ _ _
	no of nephron.	
	-> hypertension in 2nd to 3nd deca La Bicoz they have less no. of nephron.	<u> </u>
- M/c asympto oratic abd.	mass mi 1-Syx - Wilms fumous	7
- M/c abd: mass in new 6	porass ui 1-5yx - Wilms fumous porn - Multicystic	
	dysplastie kidney.	
	· · · · · · · · · · · · · · · · · · ·	0
non-funct	- 80% U/L.	0
	- 80% U/L.	

1		
1		155
		Date
1	Ö	OLIGURIA:
1	0	· U.O. < / ml/kg/hr
1	0	· Common in AKI & Aculi GN.
1	•	
1	0 0	uses of Non oliquic AKI — Aminoglycosides - Neonalal renal failure.
1	0	- Neonalal renal failure.
1		- Resolving ATN (Solyuria)
1		<i>V</i> / <i>V</i>
I	<u> </u>	POLYURIA:
1	0	· U.O. > 4-5ml/kg/hr· [Polydipsia; Polyurea]
1	0	Approach -
1	0	- Blood glucose [RBS) 200 mg/dl or FBS > 126 mg/dl]
H		or FBS > 126 mg/dl]
I	,	- → DM
	0	- Venous Blood Gas.
P	0	E) Hypo Kalemic hypochloric metabolic alkalonic
P	, •	√
Ŷ	0	Barler Syndrome; Gittle's mann Syndrome.
Î	•	
P	0	Bartters Syndrome Gifel 2572 27 Syndrome - - Severe; Early - Mild; Well preserved. - Infancy - Older child - Aller Hal = Polylydromyin - Hubo Mac
Ŷ		- Severe; Early Mild; Well preserved Infancy - Older child
P	•	- Gufancy Olger Child
P	0	1700 even coo 1 organization of good of the
P	-0-	Nephrocalcinais - Hypocalciurea.
þ	0	- Hypercalciuria
	•	(ii) Huber Cl. Luber K Normal amion anh
	0	(ii) Hyper cl , hyper k , Normal amion gap metabolie acidoses
1		1
1	0	Renal Fubular acidosis.
1	0	(22) Normal / Psychogenic 70, Water deprivation
1	•	DI
	0	Renal fubular acidosis. Renal fubular acidosis. (21) Normal Psychogenic Thiwater deprivation DI in psychogenic -> Urine osmobality doubles

1)	0
	156
DatePage	
DI → Central/XLR Nephrogenic	6
- On Vasopressin Challange, urine o	suplakty 0
doubles by 100% en central. He	
differentiated from XLR Nephru	
00 '	V •
9 4 yr; Polyunia & Polydipeia	•
Veneus blood gas normal	
Urine Osmolality	
- Basline st aroxufkg.	
- On water deprivation 2 60 moscuf	υ. •
- On Vasopréssen Challange = 70 osa	ifkg.
A = MIC Note Di	· ·
$\Delta = XLR$ Nephrogenic DÍ	e
DOC = Thiazides.	0
Best welltod of GFR estimation = Insulus	· clearann
13657 Michael 4 0 97 1 Season 3550 - Williams	0
Schwartz eGFR formula:	•
= K x height in cui	0
= K x height in cui Creatinine (my/dl)	Õ
	(6)
Formula depends on:	
Jornula depends on: - Height, muscle mass.	
Jornula depends on: - Height, muscle mass. - Melhod of estimation of creatinine	
Jornula depends on: - Height, muscle mass. - Melhod of estimation of creationine [Jaffei reaction].	· • •
Jornula depends on: - Height, muscle mass - Melhod of estimation of creationine [Jaffe's reaction].	
Jornula depends on: - Height, muscle mass. - Melhod of estimation of creatinine [Jaffei reaction]. # S. creatinine is accurately measured by - Enzyme assay / HPLC.	

		157
	0	Date
	0	
		Value of k in Schwarlz formula: Low birth weight infant — 0.33
	0	Low birth weight infant — 0.33
		Normal infant 0-18 mosths - 0.45
	0	Girls 2-16yrs — 0.55
	•	Boys 2-13 yrs - 0.55
	0	Boys 13-16yx - 0.70
	0	
	-0	# Schwartz melhod is independent of - Renal function.
		function.
1		,
1	0	HEMATURIA:
1	0	
P		# Red wrine:
9		- Beef root
	0	- Beef root - Phenolphthalin - Rifampicin
៉ា	, •	- Rifampicin
	•	
	•	Juliavaseular hemolysis.
		Intravascular hemolysis.
	0	- O
	0	If Red wrine -> look for RBC's.
	0	
I		- +
I		<i>↓ ↓</i>
		Hemoglobinuria Hematuria
		Hemoglobinuria Hematuria Myoglobinuria
		Hematuria:
-	•	- Gross
H	0	- Microscope -> > 5 RBCs/hpf on centrifuged wine
H	0	
1	0	
t	0	

	158	•
	Date	•
	Glomerular Extra glomerular	0
		•
	Cause — - İgA; MPGN; — Cystitis; PSGN. Stones;	•
	Idiopathic hypercalciuria	0
	V	©
	24 hr urine (42+) 4 vorg/kg.	6
		<u> </u>
:	Dysmorphic RBC ++	—
		-6
	Colour Cola Bright Red	-
	Pain Painless Painful.	8
	Pain Painless Painful.	•
	Profein in mine Profeinuria	•
		0
	Recurrent Gross Hemaluria:	•
	- IgA	•
	- MPGN	•
	- Ideopathic hypercalei unia.	0
		٥
	# PSGN doesn't reoccur.	_0_
	Albort's Syndrome: Traid:	•
	Fue: Ant lanticonus	-•
	Eye: Ant. Lenticonus Ear: SNHL	
	Kidney: 75% Boys ESRD before (30yn.	•
		-
	- 80% X linked > AR 15% > AD 5%	
×	- 80 % X linked > AR 15% > AD 5% - Collagen IV → 'α-5 domain (eii GB memb*)	
	· · · · · · · · · · · · · · · · · · ·	0
	# Good pasture Syndrowe — d 3 domain of collagen IV abnormality.	0
	abnormality.	

	•	. 159
	0	Oate
3	0	INV: E/ection Microscopy.
	•	→ Basement memb is irregular.
	0	→ Splitting of the lamina densa
	0	4 Lamedalion
	0	4 Straited GBM
1	0	→ Basket weave appearance (classical)
	0	//
1		Slit lamp exam" → Kerato coonus
1	_	Leuliconus
	0	
1	0	Acule Kidney Injury (AKI):
	0	Best Biosonarker - DUrine & NGAL
	0	[Neutrophilie gelalinase · associated tipocalcin].
	l description	associated tipo calcin].
	9	2) Vrine 1L-18
	•	3) Urine KIM-1 (Kidney injury molecule)
9	0	4) Urine L-FABP (Jatty acid beinding
9	•	profein).
	•	S Serum cystalin-C
	0	
	0	Types:
	0	- Prerenal
	0	- Renal
	-0	- Post renal
	0	
	0	PRE RENAL — Hypotension, Hypoxia Newborns ; hypovolemia, burns, dearrhea.
	0	Newborns : hypovoleuna, burns, dearrhea.
-	•	RENAL - ATN > HUS
	0	POST RENAL - Obstruction.
	0	`
	0	
	0	

Jackices Pre reval - Renal Urinary Sodium (megh) <20 >40 Urine Dounolality >500 <300 B. urea/ Creatinine ratio >20:1 <20:1 Fractional excusation of Nay. <1 >1 - Unine Na Serum Cr Serum Na Urine Cr Cause of ARI: M/c/c in Children/Adults Presenal → ATN - Hypotia Hypotension Drugs - Exo of Joxine Sepriss Hemoglobinuma Hemoglobinuma Hemoglobinuma Hemoglobinuma Hemoglobinuma Hemoglobinuma - Micro angiopathic hemolytic anemia - Noro angiopathic hemolytic anemia - AKI - 90% follows dlarrhea - Developed: E-coli 0157:H7 - Developing country: Shigella dysentraic type I - Germany June 2011: E-coli 0104:H4 SHIGH foxin - Cause Endo/hūlial wjury TMA (Thrombotic microangiopathy).				160	0
Urinary Sodium (megl) <20 >40 Urine Osmolality >500 <300 B. urea/ Creatinine ratio >20:1 <20:1 Fractional excreation of NeV. <1 >1 - Urine No Serum Cr - Serum Na Vrine Cr Cause of AKI: M/C/C in Children/Adults Presenal - ATN - Hyporia Hypotension Drugs - Exo of Joxini Sepsis: Hemoslobinuma - Fendo < Myoglobinuma - Micro angio parhic hemolytic anemia - Jarombo cy topenia - AKI • 90% follows dlarrhea • Developed: E.coli 0157:H7 • Developing country: Shigella dysentrace type I Germany June 2011: E.coli 0164:H4 SHIGA foxin - Cause Endo // Thrombofic microangiofathy).				Page	0
Urine boundality >500 <300 B. urea/ Creatinine ratio >20:1 <20:1 Fractional excuestion of Nay. <1 >1 Urine Na Serum Cr Serum Na Urine Cr Cause of AkI: M/c/c in Children/Adults Presenal - ATN L. Hyporia Hypotension Brugs - Exo of Joxine Sepsis " Hemoglobinuma - Endo Myoglobinuma Hemolytic Unemic Syndrome (HUS): - Micro angiopathic hemolytic anemia - Ihrombo y topenia - AkI 190% follow diarrhea Developed: E. coli 0157:H7. Developing country: Shigella dysentrace type! Germany June 2011: E. coli 0104:H4 SHIGA toxin - Cause Endo/hīlial uijury TMA(Thrombotic microangiopathy).			Pre reval	-Reval	
Urine boundality >500 <300 B. urea/ Creatinine ratio >20:1 <20:1 Fractional excuestion of Nay. <1 >1 Urine Na Serum Cr Serum Na Urine Cr Cause of AkI: M/c/c in Children/Adults Presenal - ATN L. Hyporia Hypotension Brugs - Exo of Joxine Sepsis " Hemoglobinuma - Endo Myoglobinuma Hemolytic Unemic Syndrome (HUS): - Micro angiopathic hemolytic anemia - Ihrombo y topenia - AkI 190% follow diarrhea Developed: E. coli 0157:H7. Developing country: Shigella dysentrace type! Germany June 2011: E. coli 0104:H4 SHIGA toxin - Cause Endo/hīlial uijury TMA(Thrombotic microangiopathy).	Urinar	y Sodium (meg/L)	< 20	>40	•
Joseph Server of No. 1 > 1 - Usine Na Server Cr - Server Na Vaine Cr Cause of Ak I: M/c/c in Children/Adults Presenal - ATN - Hypotension Brugs - Exo - Joxins Septis " Hemoglobinum - Endo - Myoglobinum - Endo - Myoglobinum - Hemolytic Unemic Syndrome (HUS): - Micro angiopathic hemolytic anemia - Ihronto cy topenia - Ak I • 90% follow diarrhea • Developed: E. coli 0/57: H7 • Developing country: Shigella dysentraie type I • Germany Jume 2011: E. coli 0/04: H4 SH1GA toxin - Cause Endo/hilial vijury TMA (Thrombofic microangiopathy).	Urine (osmolality		< 300	
- Urine Na Serian Cr Serian Na Vrine Cr Cause of AKI: M/c/c in Children/Adults Present → ATN L> Hyporia Hypotension Drugs ← Exo ← Joxini Sepsis: Hemoglobinina Hemoglobinina Hemoglobinina Hemoglobinina Hemoglobinina Hemoglobinina - Micro angiopathic hemolytic anemia - Micro angiopathic Ecoli 0/57:H7. Developed: Ecoli 0/57:H7. Developing country: Shigella dysentrace type I. Germany June 2011: Ecoli 0/04:H4 SHIGA toxin → Cause Endo/Milial wijury TMA(Thrombotic microangiopathy).	B. urea	/ Creatinine ratio	> 20:1	< 20:1	0
Serum Na Vrine Cr Cause of AKI: M/c/c in Children/Adults Presenal - ATN Hyporia Hyporension Brugs - Exo & Joxini Sepcies! Hemoglobinina Hemoglobinina Hemolytic Vremic Syndrome (HVS): - Micro angiopathic hemolytic anemia - Thrombocy topenia - AKI 190% follow dtarrhea Developed: E.cole 0/57:H7. Developing country: Shigella dynentrace type I. Germany June 2011: E.cole 0/04:H4 SHIGA toxin - Cause Endo Milial wijury TMA (Thrombotic microangiopathy).	Fractiona	al excreation of Na%.	</td <td>>/</td> <td>0</td>	>/	0
Serum Na Vrine Cr Cause of AKI: M/c/c in Children/Adults Presenal - ATN Hyporia Hyporension Brugs - Exo & Joxini Sepcies! Hemoglobinina Hemoglobinina Hemolytic Vremic Syndrome (HVS): - Micro angiopathic hemolytic anemia - Thrombocy topenia - AKI 190% follow dtarrhea Developed: E.cole 0/57:H7. Developing country: Shigella dynentrace type I. Germany June 2011: E.cole 0/04:H4 SHIGA toxin - Cause Endo Milial wijury TMA (Thrombotic microangiopathy).	_ Usine N	a Serum Cr			C
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Hypotension Drugs & Exo & Joxins Sepsis! Hemoglobinuma & Endo & Mynoglobinuma Hemolytic Unemic Syndrome (HUS): - Micro angiopathic hemolytic anemia - Ihrombocy topenia - Ak I 190% follows dearrhea. Developed: E.coli 0157:H7. Developing country: Shigella dysentraie type I. Germany June 2011: E.coli 0104:H4 SHIGA toxin & Cause Endo/hēlial vijury TMA (Thrombotic microangiopathy).	M	1c/c in children	1/Adults		
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Hemolytic Uremic Syndrome (HUS): - Micro angio pathic hemolytic anemia - Ihrombocy topenia - AKI 90% follows dearrhea: Developed: E. coli 0/57: H7. Developing country: Shigella dysentraie type I: Germany June 2011: E. coli 0/04: H4 SHIGA toxin -> Cause Endo/hilial wjury TMA (Thrombotic microangiofathy).			Drugs	Exo + Toxing	
Hemolytic Uremic Syndrome (HUS): - Micro angio pathic hemolytic anemia - Ihrombocy topenia - AKI 190% followi dearrhea Developed: E. coli 0157: H7 Developing country: Shigella dysentraie type I Germany June 2011: E. coli 0104: H4 SHIGA toxin -> Cause Endo Ihilial wjury TMA (Thrombotic microangiofathy).			Sepsis!		(
Hemolytic Unemic Syndrome (HUS): - Micro angio pathic hemolytic anemia - Thrombocy topema - AKI • 90% follows dearrhea • Developed: E.coli 0/57: H7. • Developing country: Shigella dysentrace type I. • Germany June 2011: E.coli 0/04: H4 SHIGA toxin -> Cause Endo/hilial wjury TMA (Thrombotic microangio pathy).		Нешо	globinuria 😽	Endo +	(
Hemolytic Uremic Syndrome (HUS): - Micro angio pathic hemolytic anemia - Thrombocy topenia - AKI • 90% follows dearrhea: • Developed: E. coli 0/57: H7: • Developing country: Shigella dysentraie type I: • Germany June 2011: E. coli 0/04: H4 SHIGA toxin -> Cause Endo/hēlial uijury TMA (Thrombotic microangiopathy).	-	Mu	palobinuria		
. 90% follows déarrhea. Developed: E. coli 0157: H7. Developing country: Shigella dysentraie type I. Germany June 2011: E. coli 0104: H4 SHIGA toxin → Cause Endo Ihēlial uijury TMA (Thrombotic microangiopathy).		J			(
. 90% follows déarrhea. Developed: E. coli 0157: H7. Developing country: Shigella dysentraie type I. Germany June 2011: E. coli 0104: H4 SHIGA toxin → Cause Endo Ihēlial wjury TMA (Thrombotic microangiopathy).	Hem	olutic Usemic Su	indrous (HUS	s):	,
. 90% follows déarrhea. Developed: E. cois 0157: H7. Developing country: Shigella dysentraie type I. Germany June 2011: E. coli 0104: H4 SHIGA toxin → Cause Endo Ihēlial uijury TMA (Thrombotic microangiopathy).	7,5	- Mican angin bath	hec hemolylic	anemia	-
. 90% follows déarrhea. Developed: E. cois 0157: H7. Developing country: Shigella dysentraie type I. Germany June 2011: E. coli 0104: H4 SHIGA toxin → Cause Endo Ihēlial uijury TMA (Thrombotic microangiopathy).	_	- The purpose to be	wa		
. 90% follows déarshea. Developed: E. coli 0/57: H7. Developing country: Shigella dysentraie type I. Germany June 2011: E. coli 0/04: H4 SHIGA toxin → Cause Endo/hēlial uijury TMA (?hrombotic microangiopathy).	_	- AKI			
Developed: E.coli 0/57:H7. Developing country: Shigella dysentrace type I. Germany June 2011: E.coli 0104:H4 SHIGA toxin → Cause Endo/hēlial ujury TMA (?hrombotic microangiopathy).		7177-			
Developed: E.coli 0/57:H7. Developing country: Shigella dysentrace type I. Germany June 2011: E.coli 0104:H4 SHIGA toxin → Cause Endo/hēlial uijury TMA (Phrombotic microangiopathy).		90% Pollows dear	~ 6 ea.		
· Developing country: Shigella dysentraie type I. · Germany June 2011: E. coli 0104: H4 SHIGA toxin	. 2)	avolated: E. coli	D/52: HZ		
· Germany June 2011: E.coli 0104: H4 SHIGA toxin → Cause Endo Melial wjury TMA (Phrombotic microangiopathy).	10	/		ducentrale time.	
SHIGA toxin -> Cause Endothelial wjury TMA (Phrombotic microangiopathy).	· &	Jeveroping Coursing	· sargera c	ings entracte 19961.	
TMA (Phrombotic microangiopathy).					
V 7 V	Ş.F.	116'A toxun → Cau	<u>se enao/hell</u>	ac ayary	
V 7 V		**** A	V	·	
	_	<u>TM</u>	A (/ Mombote	c nucroangropathy).	
Un PBS -> Schistiocytes are Diffic of HUS		000	2	ali of more	
	- Uu	PBS - Schiste	ocyles are D	stee of HUS	

4	n .
0	
	Date
0	Page
0	R: ECULIZUMAB[DOC] -> for PNH
0	⇒ drug against Cs.
10	If not available -> Plasmapheresis.
0	
10	Complications: > 9 mensible losses - 400 ml/m²
10	- Fluid overload → & → Fluid restriction
10	- Hyperkalemia → Cause arrythmia / Sudden dealt.
L	- Dilutional hypo Na. R - Restrict fluid
	- Dilulional anemia Rx - PRBCi if Hb<6
	- Metabolic acidosis.
	- Hyper PO4 -> Hypo Ca - HTN.
	- HTN.
0	
	Hyperkalemia: R - Glucose & Linsulin Lintravenously
	R - Glucose & Unsulin Untravenously
•	Ē in/0−15 min.
0	- Ca2+ Stablises Cardiac memb potential
0	- Ca ²⁺ Stablises Cardiac memb [*] potential. Souly given in ECG Changes in Hyperkalemia.
0	\ \tag{7}
	Calcium Glueonale i.v.
10	
-	Agrediania: Hyperkaleuna &:
L	# Transcellular shift into cell.
	- Insulin C dextrose.
	- Nebulised Salbufamol.
	# Cardioprofective -> i v. Calcium Glucosate.
	# 1 delivery Na to distal • Furosemide
0	
0	· i.v. NaHCQ3
0	# Dialysis · ·

1	
	•
	62
Date	_ (
	-
# K-binders -> Kaexylate polystyrene.	
al Mar I am in third in the internal in the in	
CKD (Chronic kidney disease):	
Causes in Children -	
· (Syr - Hypoplasia	•
Dusplasia Posteior relha valves (Boys)	
Posteror urelhral valves (Boys)	
·> Syrs - Acquired	
·> Syrs - Acquired GN/HUS.	
Fealures:	
A = Azotenna	
Acidosis (metabolic)	
Anemia (Normocytic Normochronic)	
SR - S/C Th EPO (Erythroporefein	(,).
B = Bone ds	
C = Cardio vascular comptication 1	
G = Grow15 failure - Multifactorial Causes.	
When GFR V - 40-60 enfuin/ 1.73 m2	
1 PO4	
1104 (1101)	
1 PTH V 1, 25 vit · D.	
1 PTH V 1, 25 vit · D.	
1 PTH V 1, 25 vit·D. Va++ Osteodystoophy.	
1 PTH V 1, 25 vit · D.	
1 PTH V 1, 25 vit·D. Va++ Osteodystoophy. (CKD-MBD)	
1 PTH V 1, 25 vit·D. Va++ Osteodystoophy. (CKD - MBD) Hyperfilteralion injung	
1 PTH V 1, 25 vit·D. Osteodystoophy. (CKD - MBD) Hyperfilteration injury ESRD (10 ml/min/1:27 ml)	
1 PTH V 1, 25 vit·D. V 1, 25 vit·D. Osteodystrophy. (CKD - MBD) Hyper filteralion injury GFR	

10	
	Date 163
	Date
10	Nephrotic Syndrome:
10	- Proteciurea > 40 mg/m²/hr or > 2g/24hr
10	- Proteinurea > 40 mg/m²/hr or > 2g/24hr - Hypoprofeinemia (Hypoalbuminemia) - Hyperlifidemia (Cholesterol > 200 mg/dl) - Edema: S. Albumin (2.5g/dl.
10	- Hyperlipidemia (cholesterol > 200 mg/dl)
10	- Edema: S. Albumin (2.59/dl.
10	
Lo	On light microscopy - Minimal changes. On Efection 9, - Effacement of foot processes
1-0-	On Gection 9, " - Effacement of foot processes
Lo	pour year
1	DOC: Preduisolone
1	
1	Cause of Edema in NS -> Na+ & H2D reabsorption.
	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
	Podocus
	POUR
0	Nephrin (
0	C 2000
r	Gene Prolein Disease NPHS1 Nephrin Finnish Congenital
0	(chr 19) nephrolit (<3 months)
	R: Nephrecloung. NPHS2 Podocin Steraid resistant FSGS
<u> </u>	
-0	(Chr 1) R: Catcin curin un hébitors Gyelosporine
0	- Julia centes / genspoane
0	Sterold toxic; Steroid dependent
-	
	- Cushingoid - HTN
	- Post. Subscapular cataract
	- Impaired alucose toler aure
•	- Impaired glucose tolerance - Short
0	& - Oral cyclophosphamide for 12wks.

	164	
	Date Page	•
	UTI (Urinary Tract Infection):	0
	Defination: Symptobone + Urine culture >105 CFU/ml	•
	0 7	•
	- Gymptom — Jever - F. coli	
		<u> </u>
	- Jemales [Boys <th><u> </u></th>	<u> </u>
	- Ascending (Hematogenous]	
	Do-1 win Charing Charles Cabrielia	—
	Best urine Specimen - Suprapubic aspiration.	-6-
	- Asymptomalic bacleriuria → Shouldon't be treated.	0
	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	9
	- M/c/c of UTI in children → VUR	9
	- M/c/c of UTI in children → VUR IOC for VUR → MCU	
		0
	VUR:	•
	· Polar scarring -> DMSA nuclear Scan	•
	· Function -> MAG3/DTPA nuclear scan.	•
	· Prophylaxis -> Antibiotic of choice	•
		6
	Colti moxazole.	0
	e Pari Haylalia at Lall-wale	-
	Sx -> Reunplantalion of both useler. 4 2ndi calion:	
,	- Break through · UTIS	
	- Reterioration of Renal function.	
		0
		9
		0

•	Date
_ 0	Paga
0	GLOMERULONEPHRITIS:
	- Hemaluria
0	- Edema
0	- HTN
0	
0	M/c/c of GN → Post streptococcal GN.
	Aculé post Streptococcal GN:
•	- Follows injection of throat (Serotype 12)/
	Skein (lerotype 49) à nephrétogenie strains of
	B-hemolytic streptococci.
	- Age → (-12ux
0	- Acule phase resolves in 4-6 wks but urine
•	normalises in 1 yr.
0	
0	4-6wks
•	Edema
0	Cola Gross hemaluria X
0	HTN
0	Cz 6-8 wke normalese.
0	
0	
0	
	In urine - Shows microscopic hemalusia
\	1
0	6-12 months. to resolve.
. 🕖	
•	Sore throat -> \$ by ASO titre (1-2wks)
0	Pyoderma → △ by anti DNA ase B (4-6wks)
•	Sore throat → △ by ASO titre (1-2wks) Pyoderma → △ by anti DNA-ase B (4-6wks) 95% PSGN recolves
•	5% PSGN → CKD
0	

fl .	•
	166
Date/_Page/	
Kidney Bx -> Endothelial & mesangial cer	ll O
proliteralion à obliteration	of •
proliferation à obliteration capillary lumen. - Neutrophil un filleration	0
- Neutrophil en killeralion	Ô
	0
Juninof morescence - Granular deposits of	I962C3
	Ig G & C ₃
STARY SKY	
# Good pasture Syndrome has linear do	posits
# Good pasture Syndrome has linear do	
	O
# Sus epitheal humps are site of PSGN.	8
	0
a Persistently of Cz found in all except:	Ó
a) Post Streptococeal GN (normalise a	Her Gsisks)
Persistently & C3 found in all except: a) Post Streptococeal GN (normalise a) b) Mesangio capillary GN c) Gryo-globulinemia	•
C) Grego-globulinemia	0
1 47 366	(
e> IE f> Shunt nephritis g> Factor H- unifation -> HUS.	(
f> shunt nephritis	
9) Factor H-mufalion -> HUS.	
7	
	0